PB83-126771

Regulations and Non-Regulatory Revisions to State Implementation Plan: Arizona

Atlantic Environmental Associates, Inc.
Waltham, MA

Prepared for

Environmental Protection Agency
Research Triangle Park, NC

Oct 81

U.S. Department of Commerce
National Technical Information Service
NTIS

United States
Environmental Protection
Agency

Office of Air Quality
Planning and Standards
Research Triangle Park NC 27711

EPA-450/2-81-022
July 1981

PB83-126771

Air

EPA

Regulations and Non-Regulatory Revisions to State Implementation Plan: Arizona

REPRODUCED BY
NATIONAL TECHNICAL
INFORMATION SERVICE
U.S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA 22161

EPA-450/2-81-022

Regulations and Non-Regulatory Revisions to State Implementation Plan: Arizona

By

Atlantic Environmental Associates, Inc.
59 Vernon Street
Waltham, MA 02154

Contract No. 68-02-3565

EPA Project Officer: Willis P. Beal

Prepared for

U.S ENVIRONMENTAL PROTECTION AGENCY
Control Programs Development Division
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

July 1981

TECHNICAL REPORT DATA
(Please read Instructions on the reverse before completing)

1. REPORT NO. EPA-450/2-81-022	2.	3. RECIPIENT'S ACCESSION NO. PB83 126771
4. TITLE AND SUBTITLE Regulations and Non-Regulatory Revisions to State Implementation Plan: Arizona		5. REPORT DATE October, 1981 6. PERFORMING ORGANIZATION CODE
7. AUTHOR(S)		8. PERFORMING ORGANIZATION REPORT NO.
9. PERFORMING ORGANIZATION NAME AND ADDRESS Atlantic Environmental Associates, Inc. 59 Vernon Street Waltham, MA 02154		10. PROGRAM ELEMENT NO. 11. CONTRACT/GRANT NO. 68-02-3565
12. SPONSORING AGENCY NAME AND ADDRESS Control Programs Development Division Office of Air Quality Planning and Standards Research Triangle Park, NC 27711		13. TYPE OF REPORT AND PERIOD COVERED 14. SPONSORING AGENCY CODE

15. SUPPLEMENTARY NOTES

EPA Project Officer: Willis P. Beal

16. ABSTRACT

This document has been produced in compliance with Section 110(h) of the Clean Air Act, as amended in 1977, which mandates periodic publication of State Implementation Plan (SIP) requirements. The first section of the document comprises the Federally approved SIP regulations. It consists of the EPA-approved State and/or local air pollution control regulations cited by reference in the Federal Register; regulations promulgated as of August 1, 1981 have been included in this document.

The present compilation constitutes an update of a previous documentation of regulations as of July 1, 1979. State and/or local air quality regulations which have not been Federally approved as of August 1, 1981, are not included. However, any omissions of regulations from this document in no way affects the ability of the respective Federal, State, or local agencies to enforce such regulations. A summary sheet of the regulatory revisions is provided to give a quick historical assessment of the changes.

The second part of the document contains the text of non-regulatory SIP revisions approved by EPA up to August 1, 1981, excluding notices or certifications of public hearings and technical support data. A complete tabulation of these revisions is also provided.

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
Air Pollution State Regulations State Implementation Plans		

18. DISTRIBUTION STATEMENT Release Unlimited	19. SECURITY CLASS *(This Report)* Unclassified	21. NO. OF PAGES 250
	20. SECURITY CLASS *(This page)* Unclassified	22. PRICE

EPA Form 2220-1 (Rev. 4-77) PREVIOUS EDITION IS OBSOLETE

This report has been reviewed by the Control Programs Development Division of the Office of Air Quality Planning and Standards, EPA, and approved for publication. Mention of trade names or commercial products is not intended to constitute endorsement or recommendation for use. Copies of the entire document are available for inspection and copying at EPA Headquarters (401 M Street SW, Washington, DC 20460), EPA's Office of Air Quality Planning and Standards (Room 826, 411 West Chapel Hill Street, Durham, NC 27701), and the appropriate EPA Regional Offices. Documents containing only the regulatory portions of each State Implementation Plan may be ordered for a nominal fee from the National Technical Information Services, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22161.

PREFACE

This document has been produced in compliance with Section 110(h) of the Clean Air Act, as amended in 1977, which mandates periodic publication of State Implementation Plan (SIP) requirements. The first section of the document comprises the Federally approved SIP regulations. It consists of the EPA approved State and/or local air pollution control regulations cited by reference in the Federal Register; all regulations Federally promulgated as of August 1, 1981 have been included.

The present compilation constitutes an update of a previous documentation of regulations as of July 1, 1979.* State and/or local air quality regulations which have not been Federally approved as of August 1, 1981 are not included. However, any omissions of regulations from this document in no way affects the ability of the respective Federal, State or local agencies to enforce such regulations.

This document is not intended to provide a tool for determining the enforceability of any given regulation. Rather, it is intended to provide a comprehensive compilation of those regulations which are incorporated by reference into Title 40, Part 52, of the Code of Federal Regulations (CFR). The exclusion of a Federally approved regulation from this document does not diminish the enforceability of the regulation. Similarly, the inclusion of a given regulation in this document does not, in itself, render the regulation enforceable by either the State or EPA.

The regulations have been organized in this document according to the official State/local agency format. However, since State air quality regulations vary widely in their organization, content, and language, a standardized subject index has been added. The index listings consist of both pollutant and activity oriented categories to facilitate usage. For example, regulations which apply to copper smelters may be found under sulfur compounds (50.2), particulate matter process weight (50.1.1), or copper smelters (51.15). Federal regulations pertaining to a given State are not included herein but can be found under Title 40 Code of Federal Regulations, Part 52.

Additionally, a summary sheet of the regulatory revisions is included to provide a quick historical assessment of the changes. These summary sheets contain the date of submittal to EPA of each revision and the Federal Register publication date on which the revision was approved by EPA. A brief description of the regulation which was submitted is also included.

In accordance with the Act, the second part of the document contains non-regulatory SIP revisions approved by EPA up to August 1, 1981. All approved non-regulatory revisions listed under Identification of Plan in the CFR are included except notices or certifications of public hearings, and technical support data. Non-regulatory submittals which have only received EPA approval on selected elements are included in their entirety with an accompanying indication of the status of Federal actions on the non-approved elements. The non-regulatory revisions have been organized in this document according to the date of publication of EPA approval in the Federal Register. For historical completeness, a complete tabulation of these revisions is provided at the beginning of this second section.

---

* Regulations and Non-Regulatory Revisions to State Implementation Plan: Arizona, EPA-450/2-80-009, prepared under Contract 68-02-3388, July 31, 1980.

SUMMARY OF
EPA-APPROVED REGULATORY REVISIONS TO STATE OF ARIZONA SIP
BETWEEN JULY 1, 1979 AND JULY 31, 1981

Publication of Approval	Submittal Date	Page	Document Description
12/17/79	07/01/75	44FR73034	Regulation 12-3-1 for Coconino County, Section 6: Regulation 4 for Mohave County, and Regulations 7-2-1.8 and 7-3-2.5 for Pinal-Gila counties.
08/11/80	03/21/79	45FR53147	Revisions to the Arizona Air Pollution Control Regulations: R9-3-1002 (22, 34); R9-3-1003 (A(A8-11), B, C); R9-3-1005 (A, (A3)); R9-3-1006 (A, (A1, 2), B, (B2, 3, 4, 5), D, E, (E1(c), 2(c)), F, G, (G1, 2), Table II); R9-3-1008 (B, (B1, 2, 6, 7)); R9-3-1010 (A, (A3), C, D, F); R9-3-1011 (A, B, (B1, 2, 3)); R9-3-1012 (b); R9-3-1014; R9-3-1017 (B, (B4), C, E); R9-3-1019 (A, B, D, D(1)(a)(i), D(1)(a)(ii)(6), D(1)(a)(iii), D(1)(c), D(1)(F)(11), H, (H1, 2), I(18, 9, 10, 11, 12, 13), J, (J10), L, M, N, (N1, 2)); R9-3-1020 (C, E); R9-3-1022 (B); R9-3-1023(A, B); R9-3-1027(F).
10/10/80	01/26/79	45FR67345	Redesignation of Air Quality Control Regions (AQCR's) submitted by the Governor. These redesignations created the need to disapprove portions of Regulations 7-1-4.1, 7-1-4.2(c), 7-1-3.6.

TABLE OF CONTENTS

STATE REGULATIONS

Revised Standard Subject Index	Regulation - Section Number	Title	Page
-	Section 7-1-1	General	1
(15.0)	7-1-1.1	Policy and Legal Authority	1
(1.0)	7-1-1.2	Definitions	1
(2.0)	7-1-1.3	Air Pollution Prohibited	7
(13.0)	R9-3-104	Recordkeeping and Reporting	7
(2.0)	7-1-1.4	Exceptions	8
(15.0)	7-1-1.5	Enforcement	8
(51.13)	R9-3-107	Unlawful Open Burning	8
(9.0)	R9-3-108	Test Methods and Procedures	10
–	Section 7-1-2	Ambient Air Quality Standards	10
(4.1)	7-1-2.1	Non-Specific Particulate	10
(4.2)	7-1-2.2	Sulfur Dioxide	10
(4.4)	7-1-2.3	Non-Methane Hydrocarbons	10
(4.6)	7-1-2.4	Photochemical Oxidants	11
(4.5)	7-1-2.5	Carbon Monoxide	11
(4.3)	7-1-2.6	Nitrogen Dioxide	12
(2.0)	7-1-2.7	Evaluation	12
(2.0)	7-1-2.8	Anti-Degradation	12
(8.0)	7-1-2.10	Emergency Episode Criteria	12
-	Article 3	Particulate Emissions from Stationary Sources	16
(50.1.2)	7-1-3.1	Visible Emissions: General	16
(50.7)	R9-3-302	Fugitive Dust	16
(51.9)	R9-3-303	Incineration	17

Revised Standard Subject Index	Regulation - Section Number	Title	Page
(51.20)	R9-3-304	Wood Waste Burners	17
(51.5)	R9-3-305	Fuel-Burning Equipment	17
(50.1.1)	7-1-3.6	Process Industries	18
(51.3)	R9-3-307	Portland Cement Plants Located in Phoenix-Tucson Air Quality Control Region	21
(51.3)	R9-3-308	Heater - Planers	21
-	Section 7-1-4	Sulfur Compound Emissions	22
(51.11)	7-1-4.1	Copper Smelters	22
(51.6)	7-1-4.2	Fuel Burning Installations	24 ㉔
(51.14)	7-1-4.3	Sulfite Pulp Mills	24
(51.18)	7-1-4.4	Sulfuric Acid Plants	24
(50.7)	7-1-4.5	Other Industries	25
-	Section 7-1-5	Organic Compound Emissions from Stationary Sources	25
(51.16)	7-1-5.1	Storage of Volatile Organic Compounds	25
(51.16)	7-1-5.2	Loading of Volatile Organic Compounds	25
(51.16)	7-1-5.3	Pumps and Compressors	26
(50.4)	7-1-5.4	Organic Solvents: Other Volatile Compounds	26
(50.4)	R9-3-505	Gasoline Volatility Testing and Control Program	26
(50.4)	R9-3-506	Gasoline Volatility Standards	26
-	Section 7-1-6	Carbon Monoxide Emissions from Stationary Sources	27
(50.5)	7-1-6.1	Industrial	27

Revised Standard Subject Index	Regulation - Section Number	Title	Page
(50.3)	Section 7-1-7	Nitrogen Oxides Emissions	27
(51.7)	7-1-7.1	Fuel Burning Equipment	27
(51.10)	7-1-7.2	Nitric Acid Plants	28
-	Section 7-1-8	Jurisdiction and Authority	28
(15.0)	R9-3-801	Original State Jurisdiction and Control	28
(15.0)	R9-3-802	Assertions of Jurisdiction	28
(15.0)	R9-3-803	Delegation of Authority to a County or a Multi-County Air Quality Control Region	29
(10.0)	7-1-8.3	New Installations	29
______	Motor Vehicle Inspection and Maintenance ______		29
(15.0)	R9-3-1001	Policy and Legal Authority	29
(1.0)	R9-3-1002	Definitions	29
(12.0)	R9-3-1003	Vehicles to be Inspected by the Mandatory Vehicular Emissions Inspection Program	33
(2.0)	R9-3-1004	State Inspection Requirements	34
(12.0)	R9-3-1005	Time of Inspections	34
(12.0)	R9-3-1006	Mandatory Vehicular Emissions Inspection	35 35
(2.0)	R9-3-1007	Evidence of Meeting State Inspection Requirements	41
(2.0)	R9-3-1008	Procedure of Issuing Certificates of Waiver	42
(12.0)	R9-3-1010	Low Emissions Tune Up	43
(2.0)	R9-3-1011	Inspection Report	47 47
(2.0)	R9-3-1012	Inspection Procedure and Fee	48 48
(2.0)	R9-3-1013	Reinspections	49 49
(2.0)	R9-3-1014	Waiver Surveillance	49 49

Revised Standard Subject Index	Regulation - Section Number	Title	Page
(2.0)	R9-3-1016	Licensing of Inspectors	50
(12.0)	R9-3-1017	Inspection of Governmental Vehicles	51
(2.0)	R9-3-1018	Certificate of Inspection	52
(2.0)	R9-3-1019	Fleet Operator Qualifications, Procedures, and Permits	52
(12.0)	R9-3-1020	State Stations Acting as Fleet Inspection Stations	59
(12.0)	R9-3-1021	Inspections Conducted by Fleet Inspection Stations for State Stations	59
(2.0)	R9-3-1022	Procedure for Waiving Inspections due to Technical Difficulties	60
(3.0)	R9-3-1023	Certificate of Exemption	60
(2.0)	R9-3-1025	Inspection of State Stations	60
(2.0)	R9-3-1026	Inspection of Fleet Stations	62
(3.0)	R9-3-1027	Registration of Repair Industry Analyzers	63
(12.0)	R9-3-1029	Vehicle Emission Control Devices	64
(12.0)	R9-3-1030	Visible Emissions; Diesel-Powered Locomotives	64

Permit Rules

Revised Standard Subject Index	Regulation - Section Number	Title	Page
(3.0)	R9-3-1203	Revocation, Suspension, or Modification of Installation and Operating Permits	65
(3.0)	R9-3-1204	Permit Nontransferable; Exception	66
(3.0)	R9-3-1205	Posting of Permit	66
(3.0)	R9-3-1206	Notice by Building Permit Agencies	66
(3.0)	R9-3-1207	Equipment Covered	67

Revised Standard Subject Index	Regulation - Section Number	Title	Page
(3.0)	R9-3-1209	Permit Fees	67 67
(3.0)	Appendix 4:	Fee Schedule for Installation Operating Permits	68 68
(3.0)	Appendix 5:	Fee Schedule for Conditional Permit	72 72

COCONINO COUNTY

Revised Standard Subject Index	Regulation - Section Number	Title	Page
-	Section 12-1	General	74 74
(2.0)	12-1-1	Legal Authority	74 74
(1.0)	12-1-2	Definitions	74 74
(2.0)	12-1-3	Air Pollution Prohibited	75 75
–	Section 12-2	Permits	76 76
(3.0)	12-2-2	Operating Permits	76 76
(3.0)	12-2-4	Permit Fees	76 76
(3.0)	12-2-5	Permit Renewals	76 76
(3.0)	12-2-7	Testing of Installations	76 76
(3.0)	12-2-8	Compliance with Terms of Installation Permit	76 76
(3.0)	12-2-9	Notification of Denial of Permit	77 77
(3.0)	12-2-10	Appeals to the Hearing Board	77 77
(3.0)	12-2-11	Permits Not Transferable	77 77
(3.0)	12-2-12	Expiration of Installation Permit	77 77
(3.0)	12-2-13	Posting of Permits	77 77

Revised Standard Subject Index	Regulation-Section Number	Title	Page
-	Section 12-3	Control of Air Contaminant Sources	77
(4.0)	12-3-1	Ambient Air Quality Standards	77
(13.0)	12-3-2	Emission Standards	78
(13.0)	12-3-3	Reporting of Emissions	78
(14.0)	12-3-4	Production of Records: Confidentiality	78
(9.0)	12-3-5	Monitoring Devices	78
(15.0)	12-316	Penalty for Violation	78
-	Section 12-4	Control of Air Contaminants	80
(50.1.2)	12-4-1	Shade, Density, or Opacity of Emissions	80
(50.7)	12-4-2	Dust Control	80
(50.7)	12-4-3	Processing of Animal or Vegetable Matter	80
(50.6)	12-4-4	Volatile and Odorous Materials	80
(51.16)	12-4-5	Storage and Handling of Petroleum Products	81
-	Section 12-5	Incinerators	82
(3.0)	12-5-1	Permit Required	82
(9.0)	12-5-2	Performance Tests: Permit Tags	82
(51.9)	12-5-3	Emission Limitations	82
(15.0)	12-5-4	Authority of Other Public Agencies	83
-	Section 12-6	Open Burning	83
(51.13)	12-6-1	Unlawful Open Burning	83
(51.15)	12-6-2	Exceptions Requiring No Permission	83
(51.13)	12-6-3	Exceptions Requireing Permission	83
(51.13)	12-6-4	Exceptions Under Special Circumstances	84

Revised Standard Subject Index	Regulation - Rule Number	Title	Page
-	Section 12-7	Violations	84
(15.0)	12-7-1	Misdemeanor: Penalty	84
(15.0)	12-7-2	Order of Abatement	84
(16.0)	12-7-3	Hearings on Orders of Abatement	85
(16.0)	12-7-5	Notice of Hearing; Publication; Service	85
(15.0)	12-7-6	Injunctive Relief	85

MARICOPA COUNTY

Revised Standard Subject Index	Regulation - Rule Number	Title	Page
-	Regulation I	General Provisions	86
(2.0)	Rule 1	Emissions Regulated; Policy; Legal Authority	86
(1.0)	Rule 2	Definitions	86
(2.0)	Rule 3	Air Pollution Prohibited	90
-	Regulation II	Permits	91
(3.0)	Rule 20	Permits Required	91
(3.0)	Rule 21	Permit Conditions	91
(3.0)	Rule 22	Permit Denial-Action-Transfer-Posting-Revocation-Compliance-Expiration	92
(3.0)	Rule 23	Permit Classes	94
(3.0)	Rule 24	Installation Permit Fees	95
(3.0)	Rule 25	Annual Operating Permit Fees	95
		Summary of Fee Schedules	
		Schedule #1 & #2 (Fuel Burning Equipment)	96
		Schedule #3 & #4 (Refuse Burning and Tank, etc.)	97
		Schedule #5 & #6 (Motors, Engines, Electric Energy Equipment)	98
		Schedule #7 (Miscellaneous)	99

Revised Standard Subject Index	Regulation - Rule Number	Title	Page	
(3.0)	Rule 26	Portable Equipment	99	99
-	Regulation III	Control of Air Contaminants	100	100
(50.1.2)	Rule 30	Visible Emissions	100	100
(50.1)	Rule 31	Emissions of Particulate Matter	100	100
(50.6)	Rule 32	Odors and Gaseous Emissions	102	102
(51.16)	Rule 33	Storage and Handling of Petroleum Products	104	104
(50.4)	Rule 34	Organic Solvents	105	105
(51.9)	Rule 35	Incinerators	108	108
-	Regulation IV	Production of Records: Monitoring: Testing and Sampling Facilities	110	110
(13.0)	Rule 40	Production of Records	110	110
(9.0)	Rule 41	Monitoring	110	110
(9.0)	Rule 42	Testing and Sampling	118	118
(16.0)	Rule 43	Right of Inspection	119	119
-	Regulation V	Unlawful Open Burning	120	120
(51.13)	Rule 50	Open Outdoor Fires	120	120
(2.0)	Rule 51	Exceptions	120	120
(2.0)	Rule 52	Conditions	121	121
(15.0)	Rule 53	Notice to Appear	121	121
-	Regulation VI	Violations	122	122
(16.0)	Rule 60	Order of Abatement: Hearings	122	122
(3.0)	Rule 61	Conditional Permit: Petition for Conditional Permit	123	123
(16.0)	Rule 62	Appeals to the Hearing Board	123	123
(3.0)	Rule 63	Decisions on Petitions for Conditional Permit: Terms and Conditions of Conditional Permit	123	123

Revised Standard Subject Index	Regulation - Rule Number	Title	Page
(16.0)	Rule 64	Decisions of Hearing Board; Subpoenas; Effective Date	124
(16.0)	Rule 65	Notice of Hearing; Publication; Service	125
(15.0)	Rule 66	Injunctive Relief	125
(15.0)	Rule 67	Misdemeanor; Penalty	125
-	Regulation VII	Emergency Procedures	126
(8.0)	Rule 70	Emergency Measures	126
-	Regulation VIII	Validity and Operation	127
(2.0)	Rule 80	Validity	127
(2.0)	Rule 81	Operation	127

MOHAVE COUNTY

Revised Standard Subject Index	Regulation - Section Number	Title	Page
-	Section 1	General	128
(15.0)	Regulation 1	Policy and Legal Authority	128
(1.0)	Regulation 2	Definitions	128
(2.0)	Regulation 3	Air Pollution Prohibited	129
(15.0)	Regulation 4	Enforcement	130
-	Section 2	Control of Air Contaminants	130
(50.1.2)	Regulation 1	Shade, Density or Opacity of Emissions	130
(50.1)	Regulation 2	Particulate Matter	130
(50.7)	Regulation 3	Reduction of Animal or Vegetable Matter	130
(51.21)	Regulation 4	Evaporation and Leakage	131
(51.16)	Regulation 5	Storage Tanks	131

Revised Standard Subject Index	Regulation - Section Number	Title	Page
-	Section 3	Emission Standards	132
(51.5)	Regulation 1	Particulate Matter from Fuel-Burning Installations	132
(50.1)	Regulation 2	Particulate Matter from Other Sources	133
(51.9)	Regulation 6	Incinerators	134
-	Section 4	Testing and Sampling Facilities	135
(9.0)	Regulation 1	Responsibility	135
(9.0)	Regulation 2	Requirements	135
-	Section 5	Open Fires	135
(4.2)	Regulation 1	Prohibition and Exceptions	135
-	Section 6	Ambient Air Quality Standards	136
(4.2)	Regulation 1	Sulfur Dioxide	136
(4.1)	Regulation 2	Non-Specific Particulate	136
(2.0)	Regulation 3	Evaluation	136
(2.0)	Regulation 4	Anti-Degradation	136
-	Section 7	Violations	136

PIMA COUNTY

Revised Standard Subject Index	Regulation - Rule Number	Title	Page
-	Regulation I	General Provisions	138
(15.0)	Rule 1	Emissions Regulated; Policy; Legal Authority	138
(1.0)	Rule 2	Definitions	138
(2.0)	Rule 3	Standard Conditions	143
(3.0)	Rule 4	Permits; Exceptions: Applications; Fees	143
(3.0)	Rule 5	Applications for Permits	148

Revised Standard Subject Index	Regulation - Rule Number	Title	Page
(16.0)	Rule 6	Appeals to Hearing Board	149
(3.0)	Rule 7	Nontransferable: Expiration	149
(3.0)	Rule 8	Permit Revocation	150
(3.0)	Rule 9	Posting of Permit	151
(3.0)	Rule 10	Notice of Building Permit Agencies	151
(13.0)	Rule 11	Classification and Reporting	152
(15.0)	Rule 12	Violations; Order of Abatement; Time for Compliance	153
(16.0)	Rule 13	Hearings on Orders of Abatement	153
(3.0)	Rule 14	Conditional Permit; Standards	153
(3.0)	Rule 15	Petition for Conditional Permit; Publication; Public Hearing	154
(3.0)	Rule 16	Decisions on Petitions for Conditional Permit; Terms and Conditions of Conditional Permit	154
(3.0)	Rule 17	Term of Conditional Permit	154
(3.0)	Rule 18	Suspension and Revocation of Conditional Permit	155
(16.0)	Rule 19	Decisions of Hearing Board; Subpoenas; Effective Date	155
(16.0)	Rule 20	Judicial Review; Grounds; Procedures	155
(16.0)	Rule 21	Notice of Hearing; Publication; Service	156
(16.0)	Rule 22	Hearing Board Fees	157
(15.0)	Rule 23	Injunction Relief	157
(2.0)	Rule 24	Precedence of Actions	157
(15.0)	Rule 25	Misdemeanor; Penalty	157
(2.0)	Rule 26	Defenses	157

Revised Standard Subject Index	Regulation - Rule Number	Title	Page
(2.0)	Rule 27	Preservation of Rights	158
(3.0)	Rule 28	Filing Fees	158
(3.0)	Rule 29	Permit Fees	158
(3.0)	Rule 30	Equipment Fees	160
(9.0)	Rule 31	Emissions Test Fee	165
(9.0)	Rule 32	Testing and Sampling Facilities	165
-	Regulation II	Emissions Prohibited	166
(50.1.2)	Rule 1	Visible Emissions	166
(50.1)	Rule 2	Emissions of Particulate Matter	167
(50.6)	Rule 3	Emissions of Gases, Vapors, Fumes or Odors	171
(51.16)	Rule 4	Storage and Handling of Petroleum Products	171
(50.4)	Rule 5	Organic Solvents	172
(51.8)	Rule 6	Operation of Asphalt Kettles	172
(51.6)	Rule 7	Emissions of Certain Sulfur Compounds	172
(51.13)	Rule 8	Open Burning	173
(7.0)	Rule 9	Malfunction of Equipment	175
(2.0)	Rule 10	Circumvention	175
(2.0)	Rule 11	Exceptions	175
(8.0)	Regulation III	Emergencies	176
(8.0)	Rule 1	Emergency Procedures	176
(2.0)	Regulation IV	Effective Dates	176
(2.0)	Rule 1	Effective Date for Rules and Regulations	176
(2.0)	Regulation V	Severability Clause	176
(4.0)	Regulation VI	Ambient Air Quality Standards	177

Substitute section

Revised Standard Subject Index	Regulation - Section Number	Title	Page	
(10.0)	Regulation VII	Standards of Performance for New Stationary Sources	179	179
(11.0)	Regulation VIII	Emissions Standards for Hazardous Air Pollutants	181	181

PINAL-GILA COUNTIES

Revised Standard Subject Index	Regulation - Section Number	Title	Page	
-	Section 7-1-1	General	182	182
(15.0)	7-1-1.1	Policy and Legal Authority	182	182
(1.0)	7-1-1.2	Definitions	182	182
(2.0)	7-1-1.3	Air Pollution Prohibited	184	184
-	Section 7-1-2	Permits: Installation and Operating	184	184
(3.0)	7-1-2.2	Permit Unit Description and Fees	184	184
(16.0)	7-1-2.4	Appeals to Hearing Board	188	188
(3.0)	7-1-2.5	Transfer: Posting: Expirations	188	188
(13.0)	7-1-2.6	Record Keeping and Reporting	188	
(15.0)	7-1-2.7	Enforcement	189	181
-	Section 7-1-4	Orders of Abatement	189	189
(15.0)	7-1-4.1	Violations: Orders of Abatement Time for Compliance	189	189
(16.0)	7-1-4.2	Hearings on Order of Abatement	189	189
-	Section 7-1-5	Review Procedure	190	190
(13.0)	7-1-5.1	Classification and Reporting: Production of Records: Confidentiality of Records: Violation: Penalty	190	190
(16.0)	7-1-5.2	Special Inspection Warrant	191	191
(16.0)	7-1-5.3	Decisions of Hearing Board: Subpoenas	192	192

Revised Standard Subject Index	Regulation - Section Number	Title	Page
(16.0)	7-1-5.4	Judicial Review: Grounds: Procedures	193
(16.0)	7-1-5.5	Notice of Hearing: Publication: Service	193
(15.0)	7-1-5.6	Injunctive Relief	194
-	Section 7-2-1	Ambient Air Quality Standards	194
(4.1)	7-2-1.1	Non-Specific Particulates	194
(4.2)	7-2-1.2	Sulfur Dioxide	194
(4.4)	7-2-1.3	Non-Methane Hydrocarbons	194
(4.6)	7-2-1.4	Photochemical Oxidants	194
(4.5)	7-2-1.5	Carbon Monoxide	194
(4.3)	7-2-1.6	Nitrogen Oxides	195
(2.0)	7-2-1.7	Evaluation	195
(2.0)	7-2-1.8	Anti-Degradation	195
-	Section 7-3-1	Emission Standards - Particulates	195
(50.1.2)	7-3-1.1	Visible Emissions: General	195
(50.7)	7-3-1.2	Fugitive Dust	195
(51.13)	7-3-1.3	Open Burning	196
(51.9)	7-3-1.4	Incineration	197
(51.20)	7-3-1.5	Wood Waste Burners	197
(50.7)	7-3-1.6	Reduction of Animal or Vegetable Matter	197
(51.5)	7-3-1.7	Fuel Burning Equipment	197
(50.1.1)	7-3-1.8	Process Industries	199
-	Section 7-3-2	Emission Standards - Sulfur Dioxide	200
(51.6)	7-3-2.2	Fuel Burning Installations	200
(51.14)	7-3-2.3	Sulfite Pulp Mills	200

Revised Standard Subject Index	Regulation - Section Number	Title	Page	
(51.18)	7-3-2.4	Sulfuric Acid Plants	200	200
(50.7)	7-3-2.5	Other Industries	201	201
-	Section 7-3-3	Emission Standards - Organic Compounds Emissions From Stationary Sources	201	201
(51.16)	7-3-3.1	Storage of Volatile Organic Compounds	201	201
(51.16)	7-3-3.2	Loading of Volatile Organic Compounds	202	202
(51.16)	7-3-3.3	Pumps and Compressors	202	202
(50.4)	7-3-3.4	Organic Solvents: Other Volatile Compounds	202	202
-	Section 7-3-4	Emission Standards - Carbon Monoxide	202	202
(50.5)	7-3-4.1	Industrial	202	202
-	Section 7-3-5	Emission Standards - Nitrogen Oxides	202	202
(51.7)	7-3-5.1	Fuel Burning Equipment	202	202
(51.10)	7-3-5.2	Nitric Acid Plants	203	203
-	Section 7-3-6	Major Sources	203	203
(15.0)	7-3-6.1	Policy and Legal Authority	203	203

YUMA COUNTY

Revised Standard Subject Index	Regulation - Section Number	Title	Page	
-	Section 8-1-1	General	204	204
(15.0)	8-1-1.1	Policy and Legal Authority	204	204
(1.0)	8-1-1.2	Definitions	204	204
(2.0)	8-1-1.3	Air Pollution Prohibited	210	210
(13.0)	8-1-1.4	Record Keeping and Reporting	210	210
(15.0)	8-1-1.5	Enforcement	210	210

Revised Standard Subject Index	Regulation - Section Number	Title	Page
-	Section 8-1-2	Ambient Air Quality Standards	210
(4.1)	8-1-2.1	Non-Specific Particulate	210
(4.2)	8-1-2.2	Sulfur Dioxide	211
(4.4)	8-1-2.3	Non-Methane Hydrocarbons	211
(4.6)	8-1-2.4	Photochemical Oxidants	211
(4.5)	8-1-2.5	Carbon Monoxide	211
(4.3)	8-1-2.6	Nitrogen Dioxide	211
(2.0)	8-1-2.7	Evaluation	211
(8.0)	8-1-2.10	Emergency Episode Criteria	211
-	Section 8-1-3	Particulate Emissions From Stationary Sources	215
(50.1.2)	8-1-3.1	Visible Emissions; General	215
(50.7)	8-1-3.2	Fugitive Dust	215
(51.9)	8-1-3.3	Incineration	216
(51.20)	8-1-3.4	Wood Waste Burners	216
(51.5)	8-1-3.5	Fuel-Burning Equipment	217
(50.1.1)	8-1-3.6	Process Industries	218
-	Section 8-1-4	Sulfur Compound Emissions	219
(51.6)	8-1-4.2	Fuel Burning Installations	219
(51.14)	8-1-4.3	Sulfite Pulp Mills	219
(51.18)	8-1-4.4	Sulfuric Acid Plants	219
(50.7)	8-1-4.5	Other Industries	220
-	Section 8-1-5	Organic Compound Emissions From Stationary Sources	220
(51.16)	8-1-5.1	Storage of Volatile Organic Compounds	220

Revised Standard Subject Index	Section Number	Title	Page
(51.16)	8-1-5.2	Loading of Volatile Organic Compounds	221
(51.16)	8-1-5.3	Pumps and Compressors	221
(50.4)	8-1-5.4	Organic Solvents; Other Volatile Compounds	221
-	Section 8-1-6	Carbon Monoxide Emissions From Stationary Sources	221
(50.5)	8-1-6.1	Industrial	221
-	Section 8-1-7	Nitrogen Oxide Emissions	221
(51.7)	8-1-7.1	Fuel Burning Equipment	221
(51.10)	8-1-7.2	Nitric Acid Plants	222
-	Section 8-1-8	Open Burning	222
(2.0)	8-1-8.1	Prohibition	222
(8.0)	8-1-8.2	Exceptions	222

REVISED STANDARD SUBJECT INDEX

- 1.0 DEFINITIONS
- 2.0 GENERAL PROVISIONS AND ADMINISTRATIVE PROCEDURES
- 3.0 REGISTRATION CERTIFICATES, OPERATING PERMITS AND APPLICATIONS
- 4.0 AIR QUALITY STANDARDS (PRIMARY AND SECONDARY)
  - 4.1 PARTICULATES
  - 4.2 SULFUR DIOXIDE
  - 4.3 NITRIC OXIDES
  - 4.4 HYDROCARBONS
  - 4.5 CARBON MONOXIDE
  - 4.6 OXIDANTS
  - 4.7 OTHERS
- 5.0 VARIANCES
- 6.0 COMPLIANCE SCHEDULES
- 7.0 EQUIPMENT MALFUNCTION AND MAINTENANCE
- 8.0 EMERGENCY EPISODES
- 9.0 AIR QUALITY SURVEILLANCE AND SOURCE TESTING
- 10.0 NEW SOURCE PERFORMANCE STANDARDS
- 11.0 NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS
- 12.0 MOTOR VEHICLE EMISSIONS AND CONTROLS
- 13.0 RECORD KEEPING AND REPORTING
- 14.0 PUBLIC AVAILABILITY OF DATA
- 15.0 LEGAL AUTHORITY AND ENFORCEMENT
- 16.0 HEARINGS, COMPLAINTS, AND INVESTIGATIONS
- 17.0 PREVENTION OF SIGNIFICANT DETERIORATION
- 18.0 AIR QUALITY MAINTENANCE AREA
- 19.0 EMISSION OFFSET POLICY
- 20.0 MAJOR STATIONARY SOURCES
- 21.0 - 49.0
  RESERVED FOR FUTURE EXPANSION OF COMMON INDEX
- 50.0 POLLUTANT - SPECIFIC REGULATIONS
  - 50.1 PARTICULATES

        - 50.1.1 PROCESS WEIGHT
        - 50.1.2 VISIBLE EMISSIONS
        - 50.1.3 GENERAL
    - 50.2 SULFUR COMPOUNDS
    - 50.3 NITRIC OXIDES
    - 50.4 VOLATILE ORGANIC COMPOUNDS
    - 50.5 CARBON MONOXIDE
    - 50.6 ODOROUS POLLUTANTS
    - 50.7 OTHERS (Pb, Hg, etc.)
- 51.0 SOURCE CATEGORY SPECIFIC REGULATIONS
    - 51.1 AGRICULTURAL PROCESSES (includes Grain Handling, Orchard Heaters, Rice and Soybean Facilities, Related Topics)
    - 51.2 COAL OPERATIONS (includes Cleaning, Preparation, Coal Refuse Disposal Areas, Coke Ovens, Charcoal Kilns, Related Topics)
    - 51.3 CONSTRUCTION (includes Cement Plants, Materials Handling, Topics Related to Construction Industry)
    - 51.4 FERROUS FOUNDRIES (includes Blast Furnaces, Related Topics)
    - 51.5 FUEL BURNING EQUIPMENT (coal, natural gas, oil) - Particulates (includes Fuel Content and Other Related Topics)
    - 51.6 FUEL BURNING EQUIPMENT (coal, natural gas, oil) - SO_2 (includes Fuel Content and Other Related Topics)
    - 51.7 FUEL BURNING EQUIPMENT (oil, natural gas, coal) - NO_2 (includes Fuel Content and Other Related Topics)
    - 51.8 HOT MIX ASPHALT PLANTS
    - 51.9 INCINERATION
    - 51.10 NITRIC ACID PLANTS
    - 51.11 NON-FERROUS SMELTERS (Zn, Cu, etc.) - Sulfur Dioxide
    - 51.12 NUCLEAR ENERGY FACILITIES (includes Related Topic)
    - 51.13 OPEN BURNING (includes Forest Management, Forest Fire, Fire Fighting Practice, Agricultural Burning and Related Topics)
    - 51.14 PAPER PULP; WOOD PULP AND KRAFT MILLS (includes Related Topics)
    - 51.15 PETROLEUM REFINERIES
    - 51.16 PETROLEUM STORAGE (includes Loading, Unloading, Handling and Related Topics)
    - 51.17 SECONDARY METAL OPERATIONS (includes Aluminum, Steel and Related Topics)
    - 51.18 SULFURIC ACID PLANTS

51.19 SULFURIC RECOVERY OPERATIONS

51.20 WOOD WASTE BURNERS

51.21 MISCELLANEOUS TOPICS

51.22 COATING OPERATIONS (Can, Coil, Paper, Fabric, Vinyl, Metal, Wire, Surface Coating)

51.23 CUTBACK ASPHALT

51.24 SOLVENT METAL CLEANING

ARIZONA STATE DEPARTMENT OF HEALTH
PHOENIX, ARIZONA

SECTION 1. GENERAL

REG. 7-1-1.1 POLICY AND LEGAL AUTHORITY

A. The intent of these regulations is to control, reduce, remove or prevent air pollution in all its forms, including all air contaminants defined in this section, originating within the State of Arizona.

B. These regulations are adopted pursuant to the authority granted by 36-1707 and 36-1717, Arizona Revised Statutes.

REG. 7-1-1.2 DEFINITIONS

A. In these regulations, unless the context otherwise requires:

1. "Air contaminants" includes smoke, vapors, charred paper, dust, soot, grime, carbon, fumes, gases, sulfuric acid mist aerosols, aerosol droplets, odors, particulate matter, windborne matter, radioactive materials, or noxious chemicals, or any other material in the outdoor atmosphere.

2. "Air pollution" means the presence in the outdoor atmosphere of one or more air contaminants or combinations thereof in sufficient quantities, which either alone or in connection with other substances by reason of their concentration and duration, are or tend to be injurious to human, plant or animal life, or cause damage to property, or unreasonably interferes with the comfortable enjoyment of life or property of a substantial part of a community, or obscures visibility, or which in any way degrades the quality of the ambient air below the standards established by the board of health.

3. "Air pollution control equipment" means equipment used to eliminate, reduce, or control the discharge of air contaminants into the ambient air.

4. "Air pollution source" means any physical facility, arrangement, device, contrivance, condition, or structure which may emit contaminants.

5. "Air quality control region" means an area so designated by the administrator of the United States Environmental Protection Agency pursuant to Section 107 of the Federal Clean Air Act as amended, and includes:

   a. Phoenix-Tucson Intrastate air quality control region which encompasses the counties of Gila, Maricopa, Pima, Pinal and Santa Cruz in Arizona.

   b. Clark-Mohave Interstate Air Quality Control Region which encompasses Clark County in Nevada and the counties of Mohave and Yuma in Arizona.

   c. Arizona-New Mexico Southern Border Interstate Air Quality Control Region which encompasses the counties of Cochise, Graham and Greenlee in Arizona and the counties of Grant, Hidalgo and Luna in New Mexico.

   d. Four Corners Interstate Air Quality Control Region which encompasses the counties of Apache, Coconino, Navajo and Yavapai in Arizona; the counties of Archuleta, Delores, LaPlata, Montezuma and San Juan in Colorado; all of San Juan County and portions of the counties of Rio Arriba, Sandoval, McKinley and Valencia in New Mexico; the counties of Emery, Garfield, Grand, Iron, Kane, San Juan, Washington and Wayne in Utah.

6. "Ambient air" means that portion of the atmosphere, external to buildings, to which the general public has access.

7. "ASME" means American Society of Mechanical Engineers. All ASME test methods referenced as guides in these rules and regulations shall be the most current methods.

8. "ASTM" means American Society for Testing and Materials. All ASTM test methods referenced as guides in these rules and regulations shall be the most current methods.

9. "Btu" means British thermal unit which is the quantity of heat required to raise the temperature of one pound of water one degree Fahrenheit.

10. "Closed loop operational control" means the rapid curtailment or cessation of smelter emissions in order to prevent the occurrence of ambient air concentrations in excess of the standards prescribed in Article 2. A closed loop system is composed of:

    a. Continuous air sampling and analyzing equipment in eight or more locations for effective monitoring of smelter emissions. The sampler sites shall be located at points of maximum concentration as determined by diffusion modeling procedures.

b. Communications adequate to alert the smelter and the division to one or more predetermined pollutant levels requiring specified remedial actions at the smelter.

c. Procedures capable of effecting rapid emission curtailment or cessation.

d. A procedure to report the incident to the division including information on pollutant levels, local meteorology, smelter operation at the time of the incident, and smelter operational response.

11. "Combustion" means the burning of matter.

12. "Department" means the state department of health.

13. "Director" means the director of the division of air pollution control.

14. "Discharge" means the release, escape, or emission of an effluent into the ambient air.

15. "Division" means the division of air pollution control within the state department of health.

16. "Dust" is finely divided solid particulate matter occurring naturally or created by mechanical processing, handling, or storage of materials in the solid state.

17. "Effluent" is any material which is emitted and subsequently escapes into the ambient air.

18. "Emission" means the act of passing into the atmosphere an air contaminant or a gas stream, visible or invisible.

19. "Equivalent opacity scale" means a measurement index for ranking plumes in terms of opacities equivalent to opacities of the Ringelmann Scale using percent opacity as the unit of measurement.

20. "Existing source" means any source which is not a new source.

21. "Fuel" means any material which is burned for the purpose of producing energy.

22. "Fugitive dust" means uncontrolled dust.

23. "Fume" means solid particulate matter resulting from the condensation and subsequent solidification of vapors of melted solid materials.

24. "Gasoline" means any petroleum distillate having a Reid vapor pressure of four pounds or more.

25. "Hearing Board" means the state air pollution control hearing board.

26. "Heat input" is the quantity of heat in terms of Btu's generated by fuels fed into fuel burning equipment under conditions of complete combustion.

27. "Incinerator" means any equipment, machine, device, contrivance, or other article and all appurtenances thereof used for the distruction by burning of refuse, salvage material, or any other combustible material.

28. "Motor vehicle" means any self-propelled vehicle designed for transporting persons or property on public highways.

29. "New source" means any source of air pollution or potential source of air pollution, the construction or modification of which was commenced after the effective date of Federal Standards appropriately applicable to such new source. For purposes of this definition, the following terms shall have the meanings specified:

    a. "Commenced" means that an owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a binding agreement or contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.

b. "Construction" means fabrication, erection, or installation of an affected facility.

c. "Modification" means any physical change in, or change in the method of operation of, an affected facility which increases the amount of any air pollutant (to which a standard applies) emitted by such facility or which results in the emission of any air pollutant (to which a standard applies) not previously emitted; except that:

   (1) Routine maintenance, repair and replacement shall not be considered physical changes, and

   (2) The following shall not be considered a change in the method of operation:

      (a) An increase in the production rate, if such increase does not exceed the operating design capacity of the affected facility;

      (b) An increase in hours of operation;

      (c) Use of an alternative fuel or raw material if prior to the effective date of the appropriately applicable Federal Standards, the affected facility was designed to accommodate such alternative use.

30. "Opacity" means the degree of obscuration of transmitted light.

31. "Operation" means any physical or chemical action resulting in the change in location, form, physical properties, or chemical character of a material.

32. "Particulate matter" means any finely divided liquid or solid material, other than uncombined water, as measured by Method 5 described in 40 Code of the Federal Regulations, Part 60, dated December 23, 1971 or by an approved equivalent ASME testing procedure.

33. "Percent opacity" means a unit of measurement shown on the equivalent opacity scale.

34. "Permanent production curtailment" means reduction of sulfur input on a continuing basis.

35. "Person" includes any public or private corporation, company, partnership, firm, association or society of persons, the federal government and any of its departments or agencies, the state and any of its agencies, departments or political subdivisions, as well as a natural person.

36. "Plume" means a visible effluent.

37. "Positive control" means permanent production curtailment or the [illegible]

38 operation of emission control equipment of sulfur removal techniques, or any combination thereof.

38. "PPM" means part per million by volume.

39. "Process" means one or more operations, including equipment and technology, used in the production of goods or services or the control of by-products or waste.

40. "Process weight" means the total weight of all materials introduced into a source operation, including fuels, where these contribute to pollution generated by the process.

41. "Process weight rate" means a rate established as follows:

    a. For continuous or long-run, steady-state source operations, the total process weight for the entire period of continuous operation or for a typical portion thereof, divided by the number of hours of such period or portion thereof.

    b. For cyclical or batch source operations, the total process weight for a period which covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such period.

42. "Reid vapor pressure" means the vapor pressure of a volatile material, such as gasoline, as determined by the Reid Method (ASTM D323) or the vapor pressure at 100 degrees Fahrenheit (F°).

43. "Ringelmann chart" means a standardized device published in the U.S. Bureau of Mines Information Circular No. 8333, employing a graduated series of opacities according to the Ringelmann scale.

44. "Ringelmann number" means the unit of measurement on the Ringelmann scale.

45. "Ringelmann scale" means a standardized rank of opacities using the Ringelmann number as the unit of measurement employed when determining the opacity of a plume.

46. "Smelter feed" means all materials utilized in the operation of a copper smelter including metals, ore concentrates, fuels and chemical reagents and shall be calculated as the aggregate sulfur content of all fuels and other feed materials whose products of combustion and gaseous by-products are emitted to the atmosphere.

47. "Smoke" means particulate matter resulting from incomplete combustion.

48. "Soot" means the carbonaceous particulate product of incomplete combustion which may be a component of smoke.

49. "Source operation" means the last operation or process which produces an air contaminant resulting from (a) the separation of the air contaminant from the process material or (b) the conversion of constituents of the process materials into air contaminants and which is not an air pollution abatement operation.

50. "Standard conditions" means a gas temperature of 60°F and a gas pressure of 14.7 pounds per square inch absolute.

51. "Vapor" means the gaseous form of a substance normally occurring in a liquid or solid state.

52. "Vapor pressure" means the pressure exerted by the gaseous form of a substance in equilibrium with its liquid or solid form.

53. "Volatility" means the capability of a substance to vaporize or change to the vapor form.

REG. 7-1-1.3 AIR POLLUTION PROHIBITED

A. No person shall cause, suffer, allow or permit to be discharged either directly or indirectly, into the ambient air, air contaminants from any source whatsoever in violation of the regulations in this part.

B. Nothing in these regulations shall be interpreted to prevent the discharge or emission of uncontaminated aqueous steam in the open air unless such discharge constitutes a safety hazard.

C. Nothing in these regulations shall be interpreted to prevent air pollution inside of buildings except as this relates to the ultimate release of contaminants to the ambient air.

D. Control methods utilized to comply with the requirements of these regulations shall not create air contaminants in concentrations in excess of applicable standards.

R9-3-104 RECORDKEEPING AND REPORTING

A. The owner or operator of any stationary source shall, upon notification from the director, maintain records of the nature and amounts of emissions from such source or any other information as may be deemed necessary by the director to determine whether such source is in compliance with applicable emission limitations or other control measures.

B. The information recorded shall be summarized and reported to the director and shall be submitted within 45 days after the end of the reporting period. Reporting periods are January 1 - June 30 and July 1 - December 31, except that the initial reporting period shall commence on the date the director issues notification of the recordkeeping requirements.

C. Information recorded by the owner or operator and copies of the summarizing reports submitted to the director shall be retained by the owner or operator for two years after the date on which the pertinent report is submitted.

D. Any records, reports or information obtained under this regulation shall be available for public inspection except as provided in A.R.S. 36-1708. In all cases quantitative and qualitative statistics pertaining to the emission of pollutants from any source or sources shall be available to public inspection and shall be correlated with applicable emission limitations.

REG. 7-1-1.4 EXCEPTIONS

Retype

B. In instances where start-up or shutdown of equipment is a normal operating condition, the director may grant a continuing, specified period of time in which to attain compliance with these regulations.

C. The department will be furnished a schedule of routine maintenance for air pollution control equipment identifying expected periods when it is necessary to shutdown such equipment. This schedule shall include:

1. Identification of the specific facility to be taken out of service as well as its location and permit number.
2. The expected length of time that the air pollution control equipment will be out of service.
3. The nature and quantity of emissions of air contaminants likely to occur during the shutdown period.
4. Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period.
5. The reasons that it would be impossible or impractical to shut down the source operation during the maintenance period.

D. This regulation shall not apply where an exemption may unduly endanger human health or safety either directly or indirectly.

REG. 7-1-1.5 ENFORCEMENT

These regulations shall be enforced according to the provisions of Title 36, Chapter 14, Arizona Revised Statutes.

R9-3-107 UNLAWFUL OPEN BURNING

A. Notwithstanding the provisions of any other regulation in this article, it is unlawful for any person to ignite, cause to be ignited, permit to be ignited, or suffer, allow, or maintain any open outdoor fire.

B. "Open outdoor fire", as used in this regulation, means any combustion of combustible material of any type outdoors, in the open where the products of combustion are not directed through a flue. "Flue", as used in this regulation, means any duct or passage for air, gases or the like, such as a stack or chimney.

C. The following fires are excepted from the provisions of this regulation:

1. Fires used only for cooking of food or for providing warmth for human beings or for recreational purposes or the branding of animals or the use of orchard heaters for the purpose of frost protection in farming or nursery operations.

2. Any fire set or permitted by any public officer in the performance of official duty, if such fire is set or permission given for the purpose of weed abatement, the prevention of a fire hazard, or instruction in the methods of fighting fires.

3. Fires set by or permitted by the state entomologist or county agricultural agents of the county for the purpose of disease and pest prevention.

4. Fires set by or permitted by the federal government or any of its departments, agencies or agents, the state or any of its agencies, departments or political subdivisions, for the purpose of watershed rehabilitation or control through vegetative manipulation.

5. Fires set for the disposal of dangerous materials where there is no safe alternative method of disposal.

D. Permission for the setting of any fire given by a public officer in the performance of official duty under paragraph 2,3, or 4 of subsection C. shall be given in writing and a copy of such written permission shall be transmitted immediately to the director of the state division of airpollution control and the control officer, if any, of the county, district or region in which such fire is allowed. The setting of any such fire shall be conducted in a manner and at such time as approved by the director of the division of air pollution control, unless doing so would defeat the purpose of the exemption.

E. Nothing in this regulation is intended to permit any practice which is a violation of any statute, ordinance, rule or regulation.

R9-3-108. TEST METHODS AND PROCEDURES

A. Except as otherwise provided in this regulation, the testing procedures and methods set forth in Title 40, Part 60 of the Code of Federal Regulations in effect as of September 1, 1974 shall be used for purposes of determining compliance with the standards set forth in these regulations.

B. In determining compliance with any visible emission standard set forth in Article 3 methods and procedures presented in Appendix 6 of these regulations shall apply.

C. Equivalent test methods and procedures may be used in lieu of those described in paragraphs A and B of this regulation if approved by the director.

SECTION 7-1-2 AMBIENT AIR QUALITY STANDARDS

REG. 7-1-2.1 NON-SPECIFIC PARTICULATE

A. Maximum annual geometric mean - Limit of 60 micrograms per cubic meter.

B. Maximum 24-hour arithmetic average - Limit of 100 micrograms per cubic meter.

REG. 7-1-2.2 SULFUR DIOXIDE

A. Maximum annual average - Limit of 50 micrograms per cubic meter.

B. Maximum 24-hour average - Limit of 260 micrograms per cubic meter.

C. Maximum 3-hour average - Limit of 1,300 micrograms per cubic meter.

REG. 7-1-2.3 NON-METHANE HYDROCARBONS

Limit of 80 micrograms per cubic meter.

REG. 7-1-2.4 PHOTOCHEMICAL OXIDANTS

A. One-hour average - Limit of 80 micrograms per cubic meter.

B. Peak value - Limit of 150 micrograms per cubic meter.

REG. 7-1-2.5 CARBON MONOXIDE

A. One-hour average - Limit of 40 milligrams per cubic meter.

B. Eight-hour average - Limit of 7 milligrams per cubic meter.

C. Any seven consecutive days average - Limit of 6 milligrams per cubic meter.

REG. 7-1-2.6 NITROGEN DIOXIDE

Maximum annual average - Limit of 100 micrograms per cubic meter.

REG. 7-1-2.7 EVALUATION

The evaluation of air quality in terms of procedure, methodology and concept is to be consistent with the guidelines of the Federal Environmental Protection Agency.

REG. 7-1-2.8 ANTI-DEGRADATION

These standards shall not be construed as permitting the preventable degradation of air quality in any area of the State.

REG. 7-1-2.10 EMERGENCY EPISODE CRITERIA

A. Conditions justifying the proclamation of an air pollution alert, air pollution warning, or air pollution emergency shall be deemed to exist whenever the director determines that the accumulation of air pollutants in any place is attaining or has attained levels which could, if such levels are sustained or exceeded, lead to a substantial threat to the health of persons. In making this determination, the director shall be guided by the following criteria:

1. "Air Pollution Forecast": An internal watch by the department shall be actuated by a national weather advisory that an atmospheric stagnation advisory (ASA) is in effect or the equivalent forecast of a stagnant atmospheric condition.

2. "Air Pollution Alert": The alert level is that concentration of pollutants at which first stage control actions are to begin. An alert shall be declared when any one of the following levels is reached at any monitoring site and meteorological conditions are such that pollutant concentrations can be expected to remain at the designated levels for 12 or more hours or increase unless control actions are taken;

   a. Sulfur dioxide - 1,050 micrograms per cubic meter, 24-hour average.

   b. Particulates - 375 micrograms per cubic meter, 24-hour average.

   c. Sulfur dioxide and particulates combined - product of sulfur dioxide in micrograms per cubic meter, 24-hour average, and particulates in micrograms per cubic meter, 24-hour average, equal to 7.5×10^4.

   d. Carbon monoxide - 23 milligrams per cubic meter, 8-hour average.

   e. Photochemical oxidants - 400 micrograms per cubic meter, 1-hour average.

   f. Nitrogen dioxide - 1,130 micrograms per cubic meter, 1-hour average, and 280 micrograms per cubic meter, 24-hour average.

3. "Air Pollution Warning": The warning level indicates that air quality is continuing to degrade and that additional control actions are necessary. A warning will be declared when any one of the following levels is reached at any monitoring site and meteorological conditions are such that pollutant concentrations can be expected to remain at the designated levels for 12 or more hours or increase unless control actions are taken:

   a. Sulfur dioxide - 1,600 micrograms per cubic meter, 24-hour average.

   b. Particulates - 625 micrograms per cubic meter, 24-hour average

   c. Sulfur dioxide and particulates combined - product of sulfur dioxide in micrograms per cubic meter, 24-hour average, and particulates in micrograms per cubic meter, 24-hour average, equal to 25.1 x 10^4.

   d. Carbon monoxide - 34 milligrams per cubic meter, 8-hour average.

   e. Photochemical oxidants - 800 micrograms per cubic meter, 1-hour average.

   f. Nitrogen dioxide - 2,260 micrograms per cubic meter, 1-hour average, and 560 micrograms per cubic meter, 24-hour average.

4. "Air Pollution Emergency": The emergency level indicates that air quality is continuing to degrade toward a level of significant harm to the health of persons and that the most stringent control actions are necessary. An emergency will be declared when any one of the following levels is reached at any monitoring site and meteorological conditions are such that this condition can be expected to remain at the designated levels for 12 or more hours:

   a. Sulfur dioxide - 2,100 micrograms per cubic meter, 24-hour average.

   b. Particulates - 875 micrograms per cubic meter, 24-hour average.

   c. Sulfur dioxide and particulates combined - product of sulfur dioxide in micrograms per cubic meter, 24-hour average, and particulates in micrograms per cubic meter, 24-hour average, equal to 39.3 x 10^4.

   d. Carbon monoxide - 46 milligrams per cubic meter, 8-hour average.

   e. Photochemical oxidants - 1,200 micrograms per cubic meter, 1-hour average.

   f. Nitrogen dioxide - 3,000 micrograms per cubic meter, 1-hour average, and 750 micrograms per cubic meter, 24-hour average.

5. "Episode Termination": Once declared, any status reached by application of these criteria shall remain in effect until the criteria for that level are no longer met. At such time, the next lower status will be assumed.

B. If the average wind speed for 24 hours is greater than 9.0 miles per hour, the criteria levels for particulates and sulfur dioxide and particulates combined shall not apply and no source control actions shall be taken.

shall

< Add

C. If after an alert or warning episode level has been declared and air pollution concentrations and meteorological conditions do not deteriorate further or improve after 48 hours and control actions have been taken, the next higher episode shall be declared and its associated control actions implemented.

D. Air pollutant concentrations levels have been established which if exceeded could constitute imminent and substantial endangerment to the health of persons. These regulations are designed to prevent the excessive buildup of air pollutants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these pollutants on the health of persons. Guidelines for the procedures and communication steps to be followed during an air pollution episode are presented in Appendices D and E of the State Air Pollution Control Implementation Plan.

E. When an air pollution alert is declared, one or more of the following control actions as applicable to the source emitting the pollutant of concern shall be implemented in the affected area:

1. All burning permits shall be suspended until further notice. The forest service shall be notified to postpone slash burning in the affected area.

2. Incineration shall be limited to the hours of 12 noon to 4 P.M.

3. Those manufacturing facilities with prearranged emission reduction plans as noted in the State Air Pollution Control Implementation Plan shall be notified to initiate alert stage control actions. Other sources shall be notified to minimize emissions by curtailing or deferring operations not on a required schedule and by maximizing the collection efficiency of control equipment. Emissions from batch operations shall be limited to the hours of 12 noon to 4 P.M.

4. The public shall be requested to voluntarily eliminate all unnecessary usage of motor vehicles.

F. When an air pollution warning is declared, one or more of the following control actions as applicable to the source emitting the pollutant of concern shall be implemented in the affected area:

1. Burning of refuse, vegetation, trade wastes, and debris shall not be permitted by any person.

2. Use of incinerators shall be prohibited.

3. Those manufacturing facilities with prearranged emission reduction plans as noted in the State Air Pollution Control Implementation Plan shall be notified to initiate warning stage control actions. Other sources shall be notified to initiate a 40 percent or greater reduction in emissions by curtailment or cessation of operations. All processing industries shall be requested to effect a maximum reduction in heat load demands.

4. If possible, power plant generating loads shall be transferred outside the affected area. Power plant production shall be reduced by purchase of available energy from neighboring utilities.

5. Highway construction and paving activities shall be halted. All soil removal or grading operations at other construction sites shall be postponed.

6. Dust-producing crop preparation and cultivation activities shall be postponed. A maximum reduction in agricultural processing and handling operations shall be effected.

7. The public shall be requested to voluntarily reduce motor vehicle usage by use of carpools and other means of transportation and elimination of unnecessary operation.

G. When an air pollution emergency is declared, one or more of the following control actions as applicable to the source emitting the pollutant concern shall be implemented in the affected area:

1. Those manufacturing facilities with prearranged emission reduction plans as noted in the State Air Pollution Control Implementation Plan shall be notified to initiate emergency stage control actions. Other manufacturing establishments shall cease operations as directed by the Governor.

2. As directed by the Governor, all commercial, governmental, and institutional establishments, except those vital for public safety and welfare and enforcement of the emergency episode control actions, shall be closed. Sub "in"

3. Generating loads at power plants shall be reduced further resulting from industrial and commercial cutbacks.

4. All construction shall be halted as directed by the Governor except that which must proceed to avoid emergent physical harm.

5. As directed by the Governor, use of motor vehicles shall be prohibited except in emergencies with approval of the local police.

ARTICLE 3. PARTICULATE EMISSIONS FROM STATIONARY SOURCES

REG. 7-1-3.1 VISIBLE EMISSIONS; GENERAL

Except as otherwise provided in these regulations relating to specific types of sources, the opacity of any plume or effluent shall not be as great as nor greater than that designated as No. 2 on the Ringelmann chart or percent opacity equivalent to No. 2 Ringelmann, except when the provisions of Reg. 7-1-1.4 apply.

R9-3-302 FUGITIVE DUST

A. No person shall cause, suffer, allow or permit a building or its appurtenances or open area to be used, constructed, repaired, altered, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Dust and other types of particulates shall be kept to a minimum by such measures as wetting down, covering, landscaping, paving, treating, or by other reasonable means.

B. No person shall cause, suffer, allow or permit the repair, construction or reconstruction of a roadway or alley without taking reasonable precautions to prevent particulate matter from becoming airborne. Dust and other particulates shall be kept to a minimum by employing temporary paving, dust palliatives, wetting down, detouring, or by other reasonable means.

C. No person shall cause, suffer, allow or permit transportation of materials likely to give rise to airborne dust without taking reasonable precautions such as wetting or covering the load, to prevent particulate matter from becoming airborne. Earth or other material that is deposited by trucking or earth moving equipment shall be removed from paved streets.

small letter

small letter

D. No person shall cause, suffer, allow or permit crushing, screening, handling or conveying of materials or other operations likely to give rise to airborne dust without taking reasonable precautions, such as the use of spray bars, wetting agents, and hoods to prevent particulate matter from becoming airborne.

small letter

E. No person shall cause, suffer, allow or permit the performance of agricultural practices including but not limited to tilling of land and application of fertilizers without taking reasonable precautions to prevent particulate matter from becoming airborne.

R9-3-303 INCINERATION

A. Notwithstanding the provisions of R9-3-301, no person shall cause, suffer, or allow to be emitted into the atmosphere from any incinerator, smoke for more than 30 seconds in any 60 minute period the appearance, density, opacity or shade of which is as dark as No. 1 of the Ringelmann scale.

B. No person shall cause, suffer, allow or permit to be emitted into the atmosphere from any incinerator or to pass a convenient measuring point near the incinerator stack outlet particulate matter to exceed 0.17 pounds per 1,000 pounds of gases, corrected to 12 percent carbon dioxide, and calculated as if no auxiliary fuel had been used.

R9-3-304 WOOD WASTE BURNERS

For a device used by the lumber industry exclusively for the burning of wood wastes the provision of R9-3-303 shall apply except during the building of a new fire not more than once each day for a period not to exceed 60 consecutive minutes. Upset time of three minutes in any one hour will not be considered a violation of these regulations.

R9-3-305 FUEL-BURNING EQUIPMENT

A. This regulation applies to installations in which fuel is burned for the primary purpose of producing steam, hot water, hot air, or other liquids, gases or solids and in the course of doing so the products of combustion do not come into direct contact with process materials. When any products or by-products of a manufacturing process are burned for the same purpose or in conjunction with any fuel, the same maximum emission limitations shall apply.

B. The heat content of solid fuel shall generally be determined according to ASTM Method D-271, "Laboratory Sampling and Analysis of Coal or Coke", or ASTM Method D-2015, "Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter". These methods shall be used as guides, but may be modified, adjusted, or added to by the director to suit specific sampling conditions or needs based upon good practice, judgment and experience.

C. For purposes of this regulation the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet. The heat input value used shall be the equipment manufacturer's or designer's guaranteed maximum input, whichever is greater. The total heat input of all fuel-burning units on a plant or premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted.

D. No person shall cause, suffer, allow or permit the emission of particulate matter, caused by combustion of fuel, from any fuel-burning operation in excess of amounts calculated by the equations presented below:

1. For equipment having a heat, input rate of 4200 million btu per hour or less, the maximum allowable emissions shall be determined by the following equation:

$$E = 1.02Q^{0.769}$$

where:

E = The maximum allowable particulate emissions rate in pounds-mass per hour.

Q = The heat input in million btu per hour.

2. For equipment having a heat input rate greater than 4200 million btu/hr., the maximum allowable emissions shall be determined by the following equation:

$$E = 17.0Q^{0.432}$$

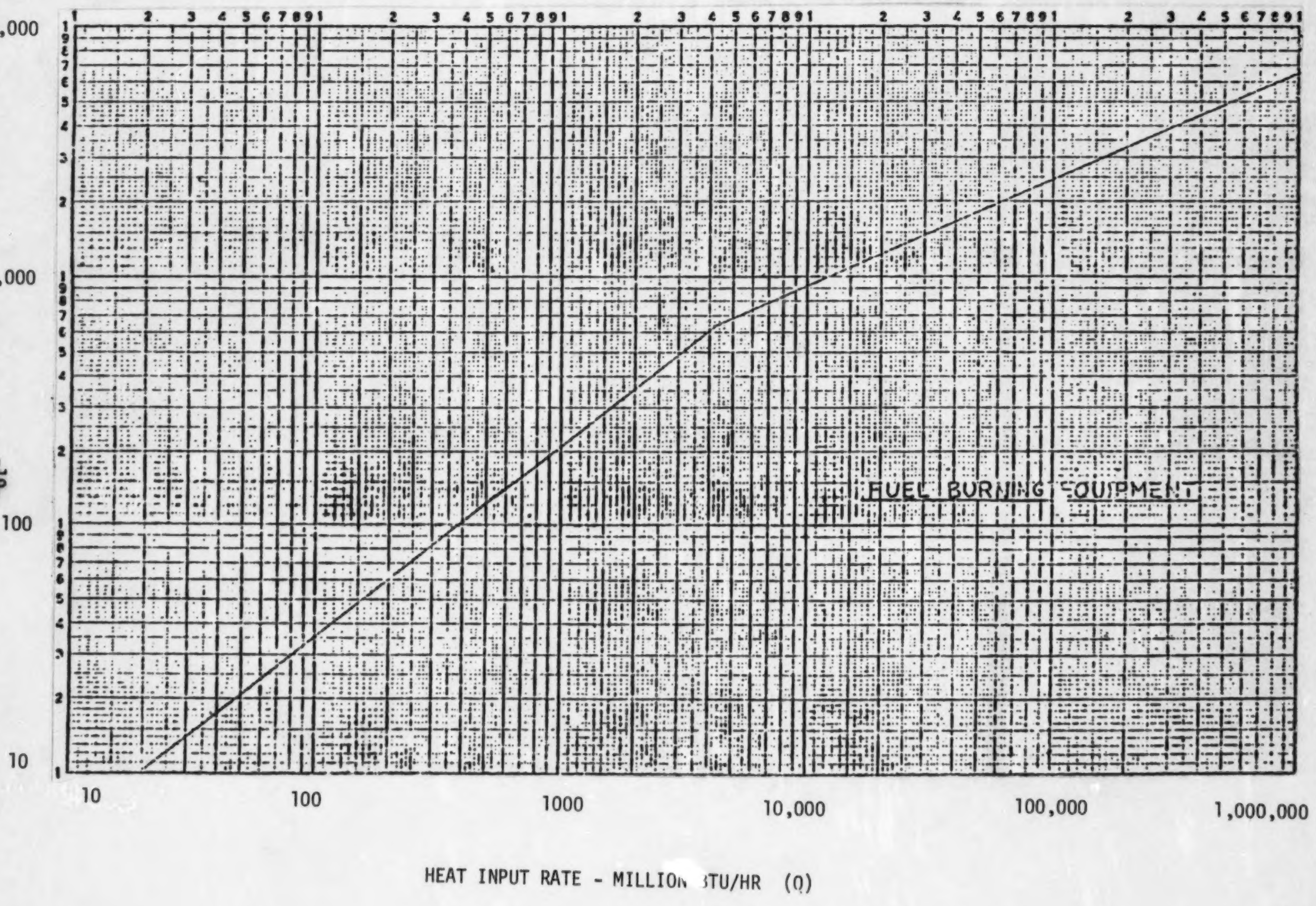
where: "E" and "Q" have the same meanings as in subparagraph 1 above.

E. For reference purposes only, the two equations in paragraph D are plotted in Figure 1. The emission values obtained from the graph are approximately correct for the heat input rates shown. However, the actual values shall be calculated from the applicable equations and rounded off to two decimal places.

REG. 7-1-3.6* PROCESS INDUSTRIES

A. No person shall cause, suffer, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any existing source operation whatsoever, except incineration and fuel-burning equipment, in total quantities in excess of the amount calculated by the equation presented below and as illustrated by the following table on the allowable rate of emission based on process weight rate:

* This regulation is disapproved for Gila, Mericopa, Pima, Pinal and Santa Cruz counties.


10,000
1,000
100
10
10
100
1000
10,000
100,000
1,000,000
FUEL BURNING EQUIPMENT
HEAT INPUT RATE - MILLION BTU/HR (Q)

PROCESS WEIGHT RATE		RATE OF EMISSION	PROCESS WEIGHT RATE		RATE OF EMISSION
Lbs/Hr	Tons/Hr	Lbs/Hr	Lbs/Hr	Tons/Hr	Lbs/Hr
100	0.05	0.551	16,000	8.00	16.5
200	0.10	0.877	18,000	9.00	17.9
400	0.20	1.40	20,000	10.00	19.2
600	0.30	1.83	30,000	15.00	25.2
800	0.40	2.22	40,000	20.00	30.5
1,000	0.50	2.58	50,000	25.00	35.4
1,500	0.75	3.38	60,000	30.00	40.0
2,000	1.00	4.10	70,000	35.00	41.3
2,500	1.25	4.76	80,000	40.00	42.5
3,000	1.50	5.38	90,000	45.00	43.6
3,500	1.75	5.96	100,000	50.00	44.6
4,000	2.00	6.52	120,000	60.00	46.3
5,000	2.50	7.58	140,000	70.00	47.8
6,000	3.00	8.56	160,000	80.00	49.0
7,000	3.50	9.49	200,000	100.00	51.2
8,000	4.00	10.4	1,000,000	500.00	69.0
9,000	4.50	11.2	2,000,000	1,000.00	77.6
10,000	5.00	12.0	6,000,000	3,000.00	92.7
12,000	6.00	13.6			

Note: To use the table, determine the process weight rate as defined in REG. 7-1-1.2A.40. Find this figure on the table, opposite which is the maximum number of pounds per hour of particulates which may be discharged into the atmosphere in any one hour. The method used for determining allowable rates of emission based on process weight tables is as follows: Interpolation of the data in the process weight table for process weight rates up to 60,000 lbs/hr shall be accomplished by use of the equation $E = 55.0\ P^{0.11} - 40$, where E = rate of emission in lbs/hr and P = process weight in tons/hr. (See following examples.)

Note: REG. 7-1-3.6 (process industries) is disapproved for the Phoenix-Tucson Intrastate Region.

EXAMPLE A: Process weight = 6 tons per hour
Equation - $E = 4.10\ P^{0.67}$

$$\begin{aligned}
\text{Log } E &= \text{Log } 4.10 + (0.67)\ (\text{Log } 6) \\
\text{Log } E &= 0.6128 + (0.67)\ (0.7782) \\
\text{Log } E &= 0.6128 + 0.5214 \\
\text{Log } E &= 1.1342 \\
E &= \text{Anti-log } 1.1342 \\
E &= 13.6 \text{ pounds per hour}
\end{aligned}$$

EXAMPLE B: Process weight = 60 tons per hour
Equation - $E = 55.0\ P^{0.11} - 40.0$

$$\begin{aligned}
\text{Log } (E+40.0) &= \text{Log } 55.0 + (0.11)(\text{Log } 60) \\
\text{Log } (E+40.0) &= 1.7404 + (0.11)(1.7782)
\end{aligned}$$

EXAMPLE B (CONTINUED)

$$\begin{aligned}
\text{Log } (E+40.0) &= 1.7404 + 0.1956 \\
\text{Log } (E+40.0) &= 1.9360 \\
(E+40.0) &= \text{Anti-log } 1.9360 \\
(E+40.0) &= 86.3 \\
E &= 86.3 - 40.0 \\
E &= 46.3 \text{ pounds per hour}
\end{aligned}$$

B. Stack emission tests to determine the amount of particulate matter emitted shall be performed in accordance with Reg. 7-1-3.3.C.

R9-3-307 PORTLAND CEMENT PLANTS LOCATED IN PHOENIX-TUCSON AIR QUALITY CONTROL REGION

A. No person shall cause, suffer, allow or permit the discharge of particulate matter from the kilns of any cement plant located in the Phoenix-Tucson Air Quality Control Region which is:

1. In excess of 0.30 pounds per ton of feed to the kilns, maximum two-hour average.
2. Greater than 20 percent opacity.

B. No person shall cause, suffer, allow or permit the discharge of particulate matter from the clinker coolers of any cement plant located in the Phoenix-Tucson Region which is:

1. In excess of 0.10 pounds per ton of feed to the kilns, maximum two-hour average.
2. Ten percent opacity or greater.

C. No person shall cause, suffer, allow or permit the discharge of particulate matter from any equipment other than the kiln or clinker cooler of any cement plant located in the Phoenix-Tucson Air Quality Control Region which is greater than 10 percent opacity or exceeds the amounts allowable under R9-3-306.B.

R9-3-308 HEATER-PLANERS

A. No person shall cause, suffer, allow or permit to be emitted into the ambient air, from any heater-planer operated for the purpose of reconstructing asphalt pavements, smoke which is of an opacity greater than 20 percent.

B. Three minutes upset time in any one hour during which the smoke exceeds 20 percent opacity will not constitute a violation of this regulation.

SECTION 7-1-4 SULFUR COMPOUND EMISSIONS

REG. 7-1-4.1 COPPER SMELTERS*

A. For new smelters, the atmospheric smelter emission shall be limited to ten percent of the sulfur contained in the feed and 6,500 pounds per hour, or the reduction necessary to meet the ambient air standards, whichever is most restrictive.

B. For existing smelters, the emission standard shall be that control necessary to meet the ambient air quality standard in Reg. 7-1-2.2.

1. The sulfur removal by means of positive control shall equal the percent reduction determined in 3 below.

2. The difference between positive control and that necessary to meet the standards in Reg. 7-1-2.2 may be achieved by intermittent production curtailment such as closed loop operational control, in accordance with Section VIII of the Environmental Protection Agency Criteria for Evaluating an Intermittent Control System.

3. The percent sulfur emission control required shall be determined by use of the proportional model as follows:

$$\frac{(A - C)}{(A - B)} \times 100 = \text{the percentage reduction required by positive control.}$$

Where A = highest annual ambient air reading in the affected area as reflected in the most accurate readings available and expressed as an annual average, or, where appropriate, the highest projected concentration in the affected area, as approved by the hearing board,

B = background concentration, and

C = 80 micrograms per cubic meter

Because of the limitations in data, resolution of analytical chemical procedures, and the effect of topography, meteorology,and smokestack geometry, the results of the above equation may be modified to a maximum of ten percent of the computed sulfur reduction by using one of the two following diffusion models:

---

* This regulation, as it pertains to copper smelters, is disapproved for the Pima, Central Arizona and Southeast Arizona Intrastate Regions. See 10/10/80 Federal Register Rulemaking.

Air Quality Implementation Planning Program, Volume I, Operator's Manual, National Air Pollution Control Administration, EPA, Washington, D.C. 1970, or

Air Quality Display Model, National Air Pollution Control Administration, Department of Health, Education and Welfare, Washington, D.C. November 1969.

Subject to the approval of the division, other models believed technically more definitive or accurate may be used instead of the two named above.

4. Notwithstanding the calculations in 3 above, existing positive control techniques shall not be reduced.

5. If increased sulfur removal efficiency (S removed/S in) occurs in ore concentrate preparation as the result of improved equipment or operations the reductions in excess of the previously attained removals can be used in the computation of smelter sulfur reductions. The allowance will be based on the difference between the mean or median of one year of current operational results and the mean or median for the three consecutive years before the effective date of this regulation.

C. All nongaseous sulfur removed in the operation of a smelter is to be used in the atmospheric sulfur reduction computations including but not limited to, slag, elemental sulfur and sulfuric acid.

D. Where two or more smelters are so situated that the sulfur emissions of each may contribute significantly to violations of the standards set forth in Reg. 7-1-2.2, and if such standards are to be met by such smelters partially by means of intermittent production curtailment, the operators of such smelters are authorized and directed to consult with each other and to devise a plan for coordinated intermittent production curtailment that will meet the applicable standards and will allocate fairly among the participating smelters the extent and timing of the necessary intermittent production curtailment. Such a plan shall be in writing and shall be submitted for approval to the director, in the case of an application for an operating permit, or the hearing board, in the case of an application for a conditional operating permit. The director or hearing board may reject a proposed plan in whole or in part and may condition its approval upon the acceptance by the parties of specific modifications or amendments. No plan for coordinated intermittent production curtailment shall be carried out until it has been approved by the director or the hearing board.

Note: Reg. 7-1-4.1 is disapproved for existing copper smelters, for the Phoenix-Tucson Intrastate Region and the Arizona portion of the Arizona-New Mexico Southern Border Interstate Region.

REG. 7-1-4.2 FUEL BURNING INSTALLATIONS

A. This regulation applies to an installation operated for the purpose of producing electric power with a resulting discharge of sulfur dioxide in the installation's effluent gases.

B. Steam power generating installations which are new sources shall not emit more than 0.80 pounds of sulfur dioxide, maximum two-hour average, per million Btu heat input when oil is fired. Steam power generating installations which are existing sources shall not emit more than 1.0 pounds of sulfur dioxide, maximum two-hour average, per million Btu heat input when oil is fired.

*C. Steam power generating installations which are new sources shall not emit more than 0.80 pounds of sulfur dioxide, maximum two-hour average, per million Btu heat input when coal is fired. Steam power generating installations which are existing sources shall not emit more than 1.0 pounds of sulfur dioxide, maximum two-hour average, per million Btu heat input when coal is fired.

Note: The approval of paragraphs A and F of Regulation 7-1-4.2 as to coal fired facilities does not apply to the Salt River Project Agricultural Improvement and Power District-Navajo Generating Station.

REG. 7-1-4.3 SULFITE PULP MILLS

No person shall cause, suffer, allow or permit discharge into the atmosphere of an amount in excess of nine pounds of sulfur oxides, calculated as sulfur dioxide, per air-dried ton of pulp produced from a sulfite pulp mill. The total emissions shall include sulfur oxides emitted from blow pits, washer vents, storage tanks, and digester relief and recovery system.

REG. 7-1-4.4 SULFURIC ACID PLANTS

A. No person shall cause, suffer, allow or permit discharge into the atmosphere of more than 4.0 pounds of sulfur dioxide per ton of sulfuric acid produced (calculated as 100 percent H_2SO_4), maximum two-hour average, from facilities that produce sulfuric acid by the contact process by burning elemental sulfur, alkylation acid, hydrogen sulfide, organic sulfides and mercaptans, or acid sludge.

B. No person shall cause, suffer, allow or permit discharge into the atmosphere of more than 0.15 pounds of sulfuric acid mist per ton of sulfuric acid produced (calculated as 100 percent H_2SO_4), maximum two-hour average, expressed as H_2SO_4, from facilities that produce sulfuric acid by the contact process by burning elemental sulfur, alkylation acid, hydrogen sulfide, organic sulfides, and mercaptans, or acid sludge.

* This regulation as it pertains to existing sources, is disapproved in the intrastate region for steam power generating installations having a total rated capacity equal to or greater than 6,500 million BTU per hour. See 10/10/80 Federal Register Publication.

C. This regulation shall not apply to existing sources nor to metallurgical plants or other facilities where conversion to sulfuric acid is utilized as a means of controlling emissions to the atmosphere of sulfur dioxide or other sulfur compounds.

REG. 7-1-4.5 OTHER INDUSTRIES

No person shall cause, suffer, allow or permit to be discharged into the atmosphere from any other industry not covered in prior regulations of this section reduced sulfur, which includes sulfur equivalent from all sulfur emissions including but not limited to sulfur dioxide, sulfur trioxide, and sulfuric acid, in excess of ten percent of the sulfur entering the process as feed.

SECTION 7-1-5 ORGANIC COMPOUND EMISSIONS FROM STATIONARY SOURCES

REG. 7-1-5.1 STORAGE OF VOLATILE ORGANIC COMPOUNDS

A. No person shall place, store or hold in any reservoir, stationary tank, or other container having a capacity of 65,000 or more gallons any gasoline or any petroleum distillate having a vapor pressure of 2.0 pounds per square inch absolute or greater under actual storage conditions, unless such tank, reservoir, or other container is a pressure tank maintaining working pressure sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere, or is equipped with one of the following vapor loss control devices, properly installed, in good working order and in operation:

1. A floating roof consisting of a pontoon type of double-deck type roof resting on the surface of the liquid contents and equipped with a closure seal to close the space between the roof eave and tank well, a vapor balloon or vapor dome, designed in accordance with accepted standards of the petroleum industry. The control equipment shall not be used if the gasoline or petroleum distillate has a vapor pressure of 12 pounds per square inch absolute or greater under actual storage conditions. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

2. Other equipment proven to be of equal efficiency for preventing discharge of hydrocarbon gases and vapors to the atmosphere.

B. Any other petroleum storage tank which is constructed or extensively remodeled on or after the effective date of these regulations shall be equipped with a submerged filling device or acceptable equivalent for the control of hydrocarbon emissions.

REG. 7-1-5.2 LOADING OF VOLATILE ORGANIC COMPOUNDS

All facilities for dock loading of petroleum products, having a vapor pressure of 1.5 pounds per square inch absolute or greater at loading pressure, shall provide for submerged filling or acceptable equivalent for control of hydrocarbon emissions.

REG. 7-1-5.3 PUMPS AND COMPRESSORS

All pumps and compressors which handle volatile organic compounds shall be equipped with mechanical seals or other equipment of equal efficiency to prevent the release of organic contaminants into the atmosphere.

REG. 7-1-5.4 ORGANIC SOLVENTS; OTHER VOLATILE COMPOUNDS

Materials such as solvents or other volatile compounds including but not limited to paints, acids, alkalis, pesticides, fertilizer and manure, shall be processed, stored, used and transported in such a manner and by such means that they will not unreasonably evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution; and where means are available to reduce effectively the contribution to air pollution from evaporation leakage or discharge, the installation and use of such control methods, devices, or equipment shall be required.

R9-3-505 GASOLINE VOLATILITY TESTING AND CONTROL PROGRAM

A. This regulation states the required properties of gasoline at the time and place of delivery in bulk in accordance with ASTM designation: D439-70, Standard Specification for Gasoline. For purposes of this regulation, "in bulk" means gasoline transferred or stored prior to delivery to a retail seller.

B. Automatic variation by the seller is provided to meet the requirements of seasonal changes in temperature, depending upon the season and the locality in which the product is to be used. This is done by providing four volatility grades, A., B., C., and D., as defined in D439-70 and differentiating the use of these grades according to the months of the year.

C. The requirements enumerated in this regulation are based upon vapor pressure and shall be determined by ASTM designation: D323-58, Standard Method of Test for Vapor Pressure of Petroleum Products (Reid Method). This method of test covers the determination of the absolute vapor pressure of volatile crude oil and volatile non-viscous petroleum products except liquefied petroleum gases.

R9-3-506 GASOLINE VOLATILITY STANDARDS

A. The seasonal distribution of the four grades of gasoline (A., B., C. And D.) shall conform to the schedule in Table 2 of D439-70 as follows:

Month	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Grade	D/C	C	C/B	B	B/A	A	A	A	A	A/B	B/C	C/D
Reid Vapor	13.5	11.5	11.5	10.5	10.5	9.0	9.0	9.0	9.0	9.0	10.0	11.5
Pressure	or		or		or					or	or	or
psig, max	11.5		10.0		9.0					10.0	11.5	13.5

SECTION 7-1-6 CARBON MONOXIDE EMISSIONS FROM STATIONARY SOURCES

REG. 7-1-6.1 INDUSTRIAL

No person shall cause, suffer, allow or permit discharge from any source carbon monoxide emissions without the use of complete secondary combustion of waste gases generated by any process source.

SECTION 7-1-7 NITROGEN OXIDES EMISSIONS

REG. 7-1-7.1 FUEL BURNING EQUIPMENT

A. This regulation applies to an installation operated for the purpose of producing power with a resulting discharge of nitrogen oxides in the installation effluent gases.

B. Steam power generating installations which are new sources shall not emit more than 0.20 pounds of nitrogen oxides, maximum two-hour average, calculated as nitrogen dioxide, per million Btu heat input when gaseous fossil fuel is fired.

C. Steam power generating installations which are new sources shall not emit more than 0.30 pounds of nitrogen oxides, maximum two-hour average, calculated as nitrogen dioxide, per million Btu heat input when liquid fossil fuel is fired.

D. Steam power generating installations which are new sources shall not emit more than 0.70 pounds of nitrogen oxides, maximum two-hour average, calculated as nitrogen dioxide, per million Btu heat input when solid fossil fuel is fired.

REG. 7-1-7.2 NITRIC ACID PLANTS

A. No person shall cause, suffer, allow or permit discharge from any new source nitric acid plant producing weak nitric acid, which is 30 to 70 percent in strength, by either the increased pressure or atmospheric pressure process, of more than 3.0 pounds of total oxides of nitrogen per ton of acid produced, maximum two-hour average, expressed as nitrogen dioxide.

B. No person shall cause, suffer, allow or permit discharge from any existing source nitric acid plant producing weak nitric acid, which is 30 to 70 percent in strength, by either the increased pressure or atmospheric pressure process. of more than 5.5 pounds of total oxides of nitrogen per ton of acid produced, maximum two-hour average, expressed as nitrogen dioxide.

SECTION 7-1-8 JURISDICTION AND AUTHORITY

R9-3-801 ORIGINAL STATE JURISDICTION AND CONTROL

The Department and Hearing Board shall have original jurisdiction and control over such air pollution matters, air pollution sources, installation permits, operating permits, conditional permits and violations that pertain to:

A. Major sources of air pollution which include all sources which are capable of generating more than seventy-five tons of air contaminants per day and all operations and activities concerning:

1. The smelting of copper ore.
2. The refining of crude oil.

B. Air pollution generated by operations and activities of all agencies and Departments of the State and its political subdivisions.

C. Air pollution generated by motor vehicles.

D. Air pollution generated by mobile or portable combustion engines, machinery and equipment which are capable, without major alteration, of being operated in more than one county.

R9-3-802 ASSERTIONS OF JURISDICTION

Except as specified in R9-3-801, jurisdiction and control of air pollution shall be by the county or multi-county air quality control region pursuant to the provisions of Article 8, Chapter 6, Title 36, Arizona Revised Statutes. The county of multi-county air quality control regions shall relinquish jurisdiction and control over such air pollution matters, air pollution sources, installation permits, operating permits, conditional permits and violations as the Director designates and at such times as he asserts jurisdiction and control at the state level. The order of the Director which asserts state jurisdiction and control shall specify the matters, geographical area or air pollution source or sources over which the Department shall exercise jurisdiction and control. Such State authority shall then be the sole and exclusive jurisdiction and control to the extent asserted and the provisions of Chapter 14, Title 36, Arizona Revised Statutes, and these regulations shall govern except as provided therein, until jurisdiction and control is surrendered by the Director to such county or region.

R9-3-803 DELEGATION OF AUTHORITY TO A COUNTY OR A MULTI-COUNTY AIR QUALITY CONTROL REGION

Upon written application by the Control officer of a county or multi-county air quality control region, the Director may delegate to such county or region authority to carry out any of the provisions of Chapter 14, Title 36, Arizona Revised Statutes or any of these rules and regulations for air pollution control.

REG. 7-1-8.3 NEW INSTALLATIONS

Local air pollution control agencies who find upon review of plans for installation permits that the source may be capable of generating more than 65 tons of air contaminants per day shall cause a copy of such plans to be submitted to the director within ten days in order that a determination may be made as to whether the new installation is a major source. For purposes of the above determination by the director, capability shall be based upon the maximum design capacity of an installation.

MOTOR VEHICLE INSPECTION AND MAINTENANCE

R9-3-1001 POLICY AND LEGAL AUTHORITY

A. These rules and regulations are adopted pursuant to the authority granted by ARS §36-1707, §36-1717, and §36-1772.

B. The intent of these regulations is to control the release into the atmosphere of air contaminants from motor vehicles and combustion engines in a manner that insures the health, safety, and general welfare of all the citizens of the State of Arizona.

R9-3-1002 DEFINITIONS

A. In this article, unless the context otherwise requires:

1. "Bureau" means the Bureau of Vehicular Emissions Inspection of the Arizona Department of Health Services.

2. "Bureau station" means an official emissions inspection station.

3. "Certificate of compliance" means a serially numbered document issued by a state station at the time of inspection indicating that the vehicle has met the emissions standards.

4. "Certificate of exemption" means a serially numbered certificate issued by the Director exempting a vehicle which is not available within the state for the inspection during the ninety days prior to registration expiration date.

5. "Certificate of inspection" means a serially numbered document indicating that a vehicle has been inspected pursuant to the provisions of ARS § 36-1776 and has passed inspection.

6. "Certificate of waiver" means a serially numbered document indicating that the requirement of passing reinspection has been waived for a vehicle pursuant to ARS § 36-1772.

7. "Constant four-wheel drive vehicle" means any four-wheel drive vehicle with four wheels which cannot be converted to two-wheel drive except by disconnecting one of the vehicle's drive shafts.

8. "Contractor" means a person, business firm, partnership or corporation with whom the director has a contract which provides for the operation of one or more official emissions inspection stations.

9. "Cruise modes" are loaded driving conditions that are simulated on a chassis dynamometer.

10. "Curb weight" means a vehicle's unloaded weight without fuel and oil plus 300 pounds.

11. "Dealer" means a person or organization licensed by the Arizona Department of Transportation as a new motor vehicle dealer, used motor vehicle dealer, or motorcycle dealer.

12. "Director" means the director of the Arizona Department of Health Services.

13. "Director's certificate" means a serially numbered document issued by the director in special circumstances where the director deems it inappropriate for the vehicle to show evidence of meeting the minimum standards for registration or reregistration.

14. "Electric powered vehicle" is a vehicle that uses electricity as a means of propulsion and does not require the combustion of fossil fuel within the confines of the vehicle in order to generate electricity.

15. "Emissions inspection station permit" means a certificate issued by the Director authorizing the holder to perform vehicular inspections pursuant to this article.

16. "Exhaust emissions" means products of combustion emitted into the atmosphere from any opening downstream of the exhaust ports of a motor vehicle engine.

17. "Field calibration gas" means a gas with assigned concentrations of CO and HC that is used by a state inspector to check the accuracy of emissions analyzers used by states stations, fleet stations, and vehicular repair facilities.

18. "Fleet emissions inspection station" or "fleet station" means any inspection facility operated under a permit issued pursuant to A.R.S. § 36-1776.

19. "Fuel" means any material that is burned within the confines of a vehicle in order to be used as the means of propelling the vehicle.

20. "Four stroke (4-stroke) vehicle" means a vehicle equipped with an engine that requires two revolutions of the crankshaft for each piston power stroke.

21. "Golf cart" means a motor vehicle having not less than three wheels in contact with the ground, having an unladen weight less than thirteen hundred pounds, which is designed to be and is operated at not more than fifteen miles an hour and is designed to carry golf equipment and persons.

22. "Governmental vehicle" means a registered motor vehicle exempt from the payment of a registration fee, or a Federally owned or leased vehicle.

23. "Inspection" means the mandatory vehicular emissions inspection.

24. "Inspection sticker" means a self-adhesive, serially numbered one and a half by two inch rectangular sticker indicating a governmental vehicle has met the State of Arizona emissions inspection requirements.

25. "Idle mode test" means an exhaust emissions test conducted at only the idle conditions of a loaded mode test.

26. "Loaded mode test" means an exhaust emissions test conducted at the idle, low and/or high cruise test conditions as prescribed in this article.

27. "Model year" means the date of manufacture of the original vehicle within the annual production period of such vehicle as designated by the manufacturer or if a reconstructed vehicle the first year of titling.

28. "Mol percent" means the percent, by volume, that a particular gas occupies in a mixture of gases at a uniform temperature.

29. "Motorcycle" means a motor vehicle having a seat or saddle for use of the rider and designed to travel on not more than three wheels in contact with the ground, but excluding a tractor.

30. "Official emissions inspection station" means an inspection facility, other than a fleet emissions inspection station, whether placed in a permanent structure or in a mobile unit for conveyance among various locations within the state, for the purpose of conducting inspections of vehicles required to be inspected pursuant to ARS § 36-1772.

31. "Pro-rate vehicle" means any vehicle whose licensing fee in the state is pro-rated by its estimated usage in the state.

32. "Program" means the Mandatory Annual Vehicular Emissions Inspection Program pursuant to A.R.S. Title 36, Chapter 14, Article 3 and this Article 10.

33. "Reconstructed vehicle" means either of the following:

    a. A reconstructed special as identified by the code letters "SP" on the portion of the vehicle's Arizona registration card or Arizona certificate of title that is reserved for identification of the vehicle's style.

    b. When the vehicle style is not shown on the Arizona registration card or certificate of title, the vehicle shall be considered to be a reconstructed vehicle if the original manufacturer of the complete vehicle cannot be identified from the body.

34. "Standard gases" means gases maintained as a primary standard for determining the composition of working gases, field calibration gases, or the accuracy of analyzers.

35. "State station" means an official emissions inspection station operated by a contractor.

36. "Two stroke (2-stroke) vehicle" means a vehicle equipped with an engine that requires one revolution of the crankshaft for each power stroke.

37. "Vehicle" means any automobile, truck, truck tractor, motor bus or self-propelled or motor-driven vehicle registered or to be registered in this state and used upon the public highways of this state for the purpose of transporting persons or property, except implements of husbandry, roadrollers or road machinery temporarily operated upon the highway.

38. "Vehicular emissions inspector" means an individual who has been licensed by the Director to perform the vehicular emissions inspection for this program.

39. "Working gases" means gases maintained by a facility to perform periodic calibration of emission analyzers.

40. Abbreviations and symbols used herein shall be as follows:

    a. A/F means air/fuel

    b. CO means carbon monoxide

    c. GVW means gross vehicle weight

d. HC means hydrocarbon

e. HP means horsepower

f. LNG means liquefied natural gas

g. LPG means liquid petroleum gas

h. MPH means miles per hour

i. MVD means the Motor Vehicle Division of the Arizona Department of Transportation

j. NDIR means non-dispersive infra-red

k. % means percent

l. PCV means positive crankcase ventilation

m. PPM means parts per million by volume

n. VIN means vehicle identification number

R9-3-1003 VEHICLES TO BE INSPECTED BY THE MANDATORY VEHICULAR EMISSIONS INSPECTION PROGRAM

A. All vehicles to be registered or reregistered in Maricopa and Pima Counties for highway use shall be inspected in accordance with this article at a state station or at a fleet station except for the following:

1. Vehicles over thirteen years of age by model year

2. Electric powered vehicles

3. Pro-rate vehicle

4. Golf carts

5. Vehicles with engine displacements less than 90 cubic centimeters

6. New vehicles registered for the first time after initial retail sale and titling in this state pursuant to ARS § 28-302

7. Vehicles registered for the first time as a reconstructed special

8. Vehicles being registered at the time of sale between private individuals except when the change in registration is accompanied by required fees for the year following expiration of the prior registration

9. Vehicles being registered at the time of sale at a public or private auction except when the change in registration is accompanied by required fees for the year following expiration of the prior registration.

10. Vehicles being registered at the time of sale from a dealer outside Maricopa or Pima Counties to a resident of Maricopa or Pima County, except when the change in registration is accompanied by required fees for the year following expiration of the prior registration.

11. Vehicles being registered at the time of change of name of ownership except when the change in registration is accompanied by required fees for the year following expiration of the prior registration or the change results from the sale by a dealership residing in Maricopa or Pima County.

12. Vehicles for which a current certificate of exemption or director's certificate has been issued.

13. Governmental vehicles operated in Maricopa or Pima County and not exempted by this article shall be emissions inspected pursuant to Section R9-3-1017.

B. For the purpose of this section, over thirteen years of age by model year means that the calendar year of the expiring registration minus the model year of the vehicle as listed on the title or registration card exceeds thirteen years.

R9-3-1004 STATE INSPECTION REQUIREMENTS

All vehicles required to be inspected by this Article shall pass the inspection by meeting the requirments of R9-3-1006 unless waived pursuant to R9-3-1008.

R9-3-1005 TIME OF INSPECTION

A. Vehicles required to be inspected pursuant to Section R9-3-1003 shall be inspected at the following times:

1. For vehicles not covered by a fleet station permit, within ninety days prior to each registration expiration date.

2. For vehicles sold by a dealer located in Maricopa or Pima County to a resident of Pima or Maricopa County, by the dealer:

    a. Who holds a fleet station permit, within twelve months prior to the registration or reregistration.

    b. Who does not hold a fleet station permit, within ninety days prior to the registration or reregistration.

No vehicle sold by a dealership outside Maricopa and Pima Counties to a resident of Maricopa or Pima County shall be required to meet the inspection requirements of this Article prior to sale as a condition of its transfer of title and registration.

3. For governmental vehicles, at least once within twelve months following the date of acquisition by the operating or activity in Maricopa or Pima County, date of initial registration, or the date of prior inspection, whichever is applicable.

4. For vehicles owned or leased by a person having a valid fleet station permit, within each twelve months following the date of the prior registration or reregistration.

5. For vehicles that are being registered in Maricopa or Pima County under conditions not specified in paragraphs 1 through 4 of this section within ninety days prior to registration.

B. Nothing in this Section shall be construed to waive a late registration fee because of failure to meet inspection requirements by the registration deadline.

R9-3-1006 Mandatory vehicular emissions inspection

A. The exhaust emissions inspection for non-diesel powered vehicles shall consist of sampling the exhaust emissions from the vehicle engine in the idle mode and measuring the concentrations of HC and CO in accordance with the requirements specified in Subsection G.

1. For diagnostic purposes only, all vehicles powered by internal combustion engines other than diesel shall be tested utilizing the dynamometer loadings shown below unless tested only in the idle mode as prescribed in Subsection B and D.

2. The loaded mode test consists of placing the vehicle driving wheels on a chassis dynamometer, placing an emissions sampling probe into the tailpipe, and analyzing the collected exhaust samples. The exhaust emissions are sampled with the vehicle operating at steady-state idle and loaded conditions contained in Table 1.

a. Loaded mode test procedure

i. The vehicle shall be tested with the engine running at normal operating temperatures.

ii. The vehicle shall be nearly level when tested in order to prevent abnormal fuel distribution.

iii. The vehicle shall be tested in accordance with the following dynamometer loading table. The vehicle speed (mph) as measured from the dynamometer rolls shall be used for all conditions.

TABLE I

DYNAMOMETER LOADING TABLE

Vehicle Curb Weight (Pounds)	Engine Displacement (Cubic Centimeters)	HIGH CRUISE MODE HP	HIGH CRUISE MODE MPH	LOW CRUISE MODE HP	LOW CRUISE MODE MPH
All	Less than 126	Idle test only		Idle test only	
Less than 2000	126 - 200	1.2-2.8	16-22	No test required	
Less than 2000	201 - 350	2.8-4.1	22-25	No test required	
Less than 2000	351 - 500	4.1-6.4	25-29	No test required	
Less than 2000	Greater than 500	6.4-8.4	29-32	No test required	
2000 - 2800	All Displacements	11.8-13.6	36-38	2.8-4.1	22-25
2801 - 3800	All Displacements	20.8-23.7	44-46	6.4-8.4	29-32
Greater than 3800	All Displacements	26.8-30	48-50	8.4-10.8	32-35

iv. The order of the test shall be with the highest load test first and the idle test last.

v. Vehicles with manual transmission shall be tested in the following manner:

(1) All vehicles shall be run in the highest gear appropriate for the prescribed speed and loading conditions.

(2) Idle mode shall be run with transmission in gear and with clutch disengaged.

(3) During cruise mode, the vehicle shall be driven at a constant throttle position to maintain the cruising speed.

vi. Vehicles with automatic transmissions shall be tested in the following manner:

(1) All test conditions shall be run with the transmission in "drive" or highest gear.

(2) Idle mode shall be run with the transmission in "drive" and the wheels braked.

(3) During cruise mode, the vehicle shall be driven at constant throttle position to maintain specified speed.

vii. Sampling analytical system for exhaust emissions measurements:

(1) All CO and HC emission analyzers shall have water traps incorporated in their sampling lines. Sampling probes must be capable of taking undiluted exhaust samples from the vehicle's exhaust system.

(2) All 4-stroke and 2-stroke vehicles other than diesel shall be inspected with NDIR analyzers capable of determining concentration of CO in mol percent with an accuracy of plus-or-minus 0.5% CO from 2 to 10 mol percent and plus-or-minus 0.25% CO from 0 to 2 mol percent.

(3) All 4-stroke vehicles other than diesel shall be inspected with NDIR analyzers capable of determining concentrations of HC as n-hexane in ppm with an accuracy of plus-or-minus 100 ppm from 500 to 2000 ppm and plus-or-minus 30 ppm from 0 to 500 ppm.

(4) All 2-stroke vehicles other than diesel shall be inspected with NDIR analyzers or equivalent capable of determining concentrations of HC as propane in ppm with an accuracy of plus-or-minus 1250 ppm from 0 to 25,000 ppm.

viii. Non-diesel powered vehicles with multiple exhaust systems shall be inspected by collecting and averaging samples in one of the following methods:

(1) Collect separate samples from each exhaust.

(2) Manifold exhaust probes which will simultaneously sample approximate equal volumes from each pipe.

(3) Manifold exhaust pipes to collect approximately equal volume samples from each pipe.

(4) Collect samples by a combination of (2) and (3) above.

The average concentration shall be used to determine the test results.

B. The idle mode test only shall be performed in lieu of the loaded mode test on any vehicle by an official emissions inspection station if:

1. The vehicle has a tire on a driving wheel with less than 2/32 inch tread, with metal protuberances, or with obviously low tire pressure (as determined by superficial visual inspection) or any other condition that in the opinion of the vehicular emissions inspector precludes loaded testing for reason of safety to personnel, equipment, or vehicle.

2. A vehicle driven by a person who, because of physical incapacity is unable to yield the driver's seat to the emissions inspector.

3. The driver refuses to yield the driver's seat to the emissions inspector or requests only the idle mode test.

4. The vehicle is unable to be tested according to the dynamometer loading table because of the vehicle's inability to attain the speeds specified.

5. The vehicle is equipped with constant four wheel drive.

C. No mandatory vehicular emissions inspection shall be performed by an official emissions inspection station on any vehicle that is carrying, loaded with, or towing a trailer loaded with explosives or any other hazardous material not used as fuel for the vehicle.

D. At the option of the fleet station, vehicles that qualify as part of a fleet station inventory may be tested in the idle mode only.

E. Any diesel-powered motor vehicle except those built primarily as private passenger vehicles should not emit visible exhaust emissions in excess of the standards set forth in Subsection G when inspected according to any of the following test procedures:

1. When a diesel-powered vehicle is operated on a chassis dynamometer

    a. With the vehicle not under load select a gear ratio which will produce a maximum vehicle speed of 45-60 mph at governed or maximum rated rpm if the vehicle has a manual transmission or an automatic transmission with individual gear selection.

    b. With engine running at governed or maximum rated engine rpm, at normal operating temperature apply the dynamometer load until such loading reduces the engine rpm to 90% of the governed speed at wide open throttle position or, in the case of vehicles with automatic transmissions with gear kickdown, load the engine to a speed just above the kickdown speed or 90% of governed speed, whichever is the higher speed. If the chassis dynamometer does not have enough horsepower absorption capability to lug the engine down to these speeds, brakes may be used to assist the dynamometer. The opacity reading made over a period of five seconds with the engine under such loading shall be compared with the standard specified in paragraph G.2. for diesel-powered vehicles.

    c. With the engine idling observe the exhaust opacity for five seconds.

2. When a diesel-powered vehicle is loaded by its own brakes

   a. Select a gear ratio which will produce a maximum speed of ten-fifteen mph at governed engine rpm. Drive vehicle at ten-fifteen mph at governed engine rpm or maximum rated rpm.

   b. Load the engine by applying brakes until engine rpm is loaded down to 90% of the governed or maximum rated engine rpm at wide open throttle positions. If the vehicle does not have a tachometer, the vehicle may be loaded to 90% of governed or maximum rated speed. The opacity reading made over a period of five seconds with the engine under such brake loading shall be the opacity reading used for comparison with the standard specified in paragraph G.2. for diesel-powered vehicles.

   c. With the engine idling observe the exhaust opacity for five seconds.

3. For vehicles equipped with more than one exhaust stack or pipe, the reading taken from outlet giving the highest opacity reading shall be used for comparison with the standard.

4. Opacity readings shall be taken by a licensed emissions inspector certified to visually read opacity or by an opacity meter that is a full flow, direct reading, continuous reading, light extinction type using a collimated light source and photo-electric cell which is accurate within plus or minus 5%.

F. Any diesel-powered motor vehicle built primarily for carrying nine passengers or less should not emit exhaust emission smoke in excess of the visual emissions standards specified in Paragraph 9G.2. when inspected for a minimum of five continuous seconds at high cruise, low cruise and idle conditions prescribed in Subsection A for the loaded mode inspection.

G. All non-diesel powered vehicles shall not exceed the idle mode exhaust emissions standards as prescribed in Table II when the exhaust emissions are sampled under the conditions as prescribed in Subsection A. Any vehicle that exceeds the idle mode standards shall fail the emissions inspection.

1. Emissions from all internal combustion engines other than diesel should normally not exceed the loaded mode standards for HC and CO contained in Table II. The loaded mode standards are for diagnostic and advisory information.

   a. All rotary piston engines shall be treated in the same manner as 4-stroke engines with four cylinders or less.

   b. All turbine engines shall be treated as 4-stroke engines having more than four cylinders.

Emission Standards
(MAXIMUM ALLOWABLE)

TYPE	VEHICLE MODEL YEAR	VEHICLE CURB WEIGHT (POUNDS)	NUMBER OF CYLINDERS	HIGH CRUISE HC PPM	HIGH CRUISE CO %	LOW CRUISE HC PPM	LOW CRUISE CO %	IDLE MODE HC PPM	IDLE MODE CO %
4-stroke MOTORCYCLES	All	ALL	All	700	8.6			1,800	5.5
4-stroke	1975 and newer	6000 OR LESS	All 4 CYLINDERS OR LESS	100**	0.9**	120	1.0	250	2.5
4-STROKE	1975 AND NEWER	6000 OR LESS	MORE THAN 4 CYLINDER	100**	0.9**	120	1.0	250	2.2
4-STROKE	1975 AND NEWER	GREATER THAN 6000	ALL	300	2.5	300	3.0	350	5.0
4-stroke	1972 - 1974	ALL	4 cylinders or less	380**	3.0**	380	3.50	450	6.0
4-stroke	1972 - 1974	ALL	More than 4-cylinders	300**	2.50**	300	3.0	400	5.5
4-stroke	1968 - 1971	ALL	4 cylinders or less	450**	3.75**	450	4.25	800	6.5
4-stroke	1968 - 1971	ALL	More than 4 cylinders	380**	3.00**	380	3.50	750	6.5
4-stroke	1967 and older	ALL	4 cylinders or less	1000**	5.00**	1000	6.00	1,800	7.5
4-stroke	1967 and older	ALL	More than 4 cylinders	700**	4.25**	700	5.25	1,200	7.5
2-stroke	All	All	All	18,000*	5.0			18,000*	5.0

*Measured as propane equivalent gas. All other HC values measured as N-hexane.

**LOW CRUISE STANDARD WILL BE SUBSTITUTED FOR HIGH CRUISE STANDARD AND LOW CRUISE WILL BE ELIMINATED IF THE VEHICLE WEIGHS LESS THAN 2000 CURB WEIGHT.

2. Exhaust emissions from diesel powered vehicles should not exceed 20% visual opacity for smoke at the test conditions prescribed in Subsections E and F. A diesel powered vehicle that exceeds the 20% visual opacity in the idle mode shall fail the emissions test. The loaded tests are for diagnostic and advisory information.

3. If a diesel-powered vehicle other than a vehicle built primarily for carrying nine passengers or less fails to meet this standard as determined by visual observation by a vehicular emissions inspector at a State Station, the visual observation must be verified by an opacity meter.

H. Vehicles that are designed to operate with more than one fuel shall be tested on the fuel used by the vehicle at time of inspection. The corresponding emissions standards for that fuel shall apply.

I. All non-diesel powered reconstructed vehicles that are subject to this program shall be inspected for emissions compliance using the emissions standards applicable to vehicles that are thirteen years of age at the time of inspection.

J. Any vehicle other than a diesel-powered vehicle or two-stroke vehicle that emits any visible emissions for ten consecutive seconds or more is "excessive" for the purposes of ARS § 28-955.B.

R9-3-1007 Evidence of meeting state inspection requirements

A. Any of the following documents, when complete, unaltered and dated no more than ninety days prior to registration expiration date, shall be accepted by the county assessor as evidence that a vehicle is in compliance with the requirements of this article unless he has reason to believe it is a false document. Documents accompanying a late registration may be dated subsequent to the registration expiration date.

1. Certificate of compliance

2. Certificate of waiver

3. Certificate of exemption

4. Director's certificate

B. Complete and unaltered certificates of inspection dated within twelve months of registration shall be accepted by the county assessor as evidence that a vehicle is in compliance with the requirements of this article unless he has reason to believe it is a false document.

C. Governmental vehicles for which only weight fees are paid shall be registered without evidence of inspection.

R9-3-1008 Procedure for issuing certificates of waiver

A. A certificate of waiver will be issued upon providing evidence to the director that repairs have been made to a vehicle that fails the idle test solely because of air-gas mixture in accordance with the following procedure:

1. The inspection report shall be completed by a repairman utilizing an emissions analyzer registered by the bureau. In completing the inspection report the following information shall be included:

   a. Repairs made

   b. Idle emission concentrations of CO and HC upon completion of repairs

   c. Registration number of emission analyzer used by the repair facility in measuring the emissions concentrations

   d. Name and address of facility making the repairs

   e. Signature of person certifying repairs were made

   f. Date and cost of repairs

2. The completed inspection report including the certificate section shall be submitted to the bureau with a fee of one dollar, payable to the Arizona Department of Health Services.

3. The certificate section of the inspection report will be embossed and returned to the applicant.

4. The air-gas mixture failure is repaired if the values of both the CO and HC emission concentration when measured by a registered emissions analyzer in the idle test mode are below the maximum allowable concentration specified in Section R9-3-1006.

B. A certificate of waiver will be issued at the time of reinspection to a vehicle failing reinspection if the repairs specified in section R9-3-1010 have been accomplished, or the maximum repair cost specified in subsection G thereof has been reached as indicated by the following information on the inspection report from the previous inspection:

1. Emission related repairs made.

2. Idle emissions concentrations of CO and HC before-and-after-repairs if an NDIR analyzer is used

3. Registration number of emission analyzer used by the repair facility in measuring the emission concentrations

4. Name and address of activity making repairs

5. Signature of person certifying repairs were made

6. Date of repairs

R9-3-1010 Low emissions tune up

A. A low emissions tune-up shall consist of performing the following procedures:

1. Connect tachometer, and if available, connect engine analyzer oscilloscope and HC/CO NDIR analyzer to warmed-up vehicle and record emission values. CAPS

2. Inspect for dirty or plugged air cleaner and stuck choke. Replace and repair as required.

3. With air filter installed, adjust idle speed and A/F mixture in accordance with vehicle manufacturer's specifications. As an aid, the CO values in Subsection F may be used.

Note: If vehicle is equipped with fuel injection system or an alternate fuel (LPG or LNG) following manufacturer's recommended adjustment procedure.

4. Check dwell (or point gap) and basic timing according to manufacturer's specifications and adjust as required.

5. Check PCV valve for correct operation and verify free flow through the PCV system passages and hoses. Repair and replace as required.

6. Check vacuum hoses for leaks, repair and replace as required.

7. Make final adjustments in accordance with manufacturer's specifications to idle speed and A/F mixture. If an HC/CO NDIR analyzer is used, perform final idle test in accordance with R9-3-1006 and record HC and CO values. CAPS

B. The low emissions tune-up must be performed on all vehicles to qualify for a waiver if the vehicle fails reinspection. No further repairs are required on pre-1968 model year vehicles.

C. No further repairs are required on 1968 and later model year vehicles to qualify for a waiver if the vehicle fails reinspection when a registered HC/CO NDIR analyzer is used in performing the low emissions tune-up and when the idle HC and CO emissions values recorded pursuant to Paragraph A.7. are below those specified in Section R9-3-1006.

D. Recommended repairs required for all 1968 and later model year vehicles except those specified in Paragraph C are as follows:

1. For vehicles failing CO only, check for high float setting, leaky power valve, faulty or worn needles, seats, jets or improper jet size. Repair and replace as required. Carburetor replacement is not required.

2. For vehicles failing HC or HC and CO, check for faulty spark plugs and faulty, open, crossed, or disconnected plug wires. Repair and replace components as required. Other repairs recommended: Check distributor component malfunctions including vacuum advance, faulty points, condenser, or distributor cap crossfire and repair or replace as required.

E. The recommended idle mode emission values for the adjustments required in the above procedures are as follows. High cruise tuning values are for diagnostic value and guidance.

RECOMMENDED MAXIMUM "LOW EMISSION" EXHAUST TUNING VALUES:

MODEL YEAR GROUP	NO. OF CYLINDERS	IDLE		HIGH CRUISE	
		HC (PPM)	CO (%)	HC (PPM)	CO (%)
PRE 1968	4 or less	500	5.0	300	3.5
	more than 4	350	4.0	300	2.5
1968-1971	4 or less	350	4.5	300	3.0
	more than 4	300	3.5	250	2.0
1972-1974	4 or less	300	4.0	300	3.0
	more than 4	250	3.0	250	1.5
1975	4 or less	200	3.0	250	2.5
	more than 4	200	2.5	200	1.5
1975 CCE*	all	150	1.0	100	0.7
1976	4 or less	200	2.5	200	2.0
and newer	more than 4	150	2.0	150	1.5
1976 CCE* and newer	all	150	1.0	100	0.7

NOTE 1: When testing 1975 and 1976 model year heavy duty vehicles (over 6000-lb. GVW) use above values for 1972 - 1974 model year with more than 4 cylinders.

NOTE 2: Some heavy duty vehicles over 10,000 lb. GVW may not be capable of being tuned to meet these recommended standards.

CCE* Catalytic converter equipped.

F. The maximum required repair cost for pre-1968 model year vehicles to quality for a certificate of waiver is $25.00- The maximum required repair cost for post-1967 model year vehicles is $75.00 or ten percent of the specified dollar value for the make and model year as listed listed below. This does not prevent the vehicle owner from authorizing or performing more than the required repairs. Vehicle operators who are having their vehicle reinspected shall have repair receipts available when requesting a certificate of waiver.

VEHICLE	MARKET VALUE
All pre-1968 model year	not applicable
American Motors:	
1968 All except Jeep	$430
1969 All except Jeep	$580
Chrysler:	
1968 Imperial/Chrysler/Dodge/Plymouth	$420
1969 Imperial/Chrysler/Dodge/Plymouth	$560
General Motors:	
1968 Chevrolet/Buick/Oldsmobile/Pontiac	$530
1969 Chevrolet/Buick/Oldsmobile/Pontiac	$710
1968 Cadillac	$620
Ford:	
1968 Ford/Mercury	$540
1969 Ford/Mercury	$720
1968 Lincoln	$570
Austin:	
1968	$250
1969	$300
1970	$400
1971	$540
Datsun:	
1968	$460
1969	$610
Fiat:	
1968	$470
1969	$630
Ford Cortina:	
1968	$280
1969	$400
1970	$570
Opel:	
1968	$380
1969	$500
1970	$670
Renault:	
1968	$450
1969	$590
Rover:	
1968	$580
Simca:	
1968	$350
1969	$450
1970	$590
Sunbeam:	
1969	$250
Toyota:	
1968	$580
Reconstructed vehicles:	
1968 - 1970	$300
1971	$500
1972	$700

[illegible] copy ←

R9-3-1011 Inspection report

A. Each vehicle inspected at a State station shall be provided an inspection report of a design approved by the Director and shall provide for the following information:

1. License plate number
2. Vehicle identification number
3. Model year of vehicle
4. Make of vehicle
5. Style of vehicle
6. Type of fuel
7. Mileage
8. Emissions standards
9. Emissions measurements
10. Recommended repairs
11. Final test results
12. Repairs performed
13. Cost of repairs
14. Registration number of emissions analyzer used in making repairs
15. Name and address of the business firm or person making the repairs
16. Signature of person certifying repairs
17. Date of inspection
18. Serial number of report
19. Inspection number by station and lane

B. Each vehicle failing the initial inspection shall receive inspection report supplement supplied by the bureau containing the following:

1. Diagnostic information
2. Applicable maximum repairs
3. Instructions for waiver of gas mixture failures

C. The inspection report will provide a tear-out section to be used as a certificate of compliance for vehicles that pass the inspection or as a certificate of waiver when applicable. The tear-out section is a certificate of compliance when the words "compliance" or "pass" appear in the appropriate location on the printout. The tear-out section is a certificate of waiver when the words "test", "waiver," or "fail," as applicable, appear in the appropriate location on the printout. The tear out section shall contain the following information:

1. License plate number
2. Vehicle identification number
3. Final results
4. Serial number of the inspection report
5. Date of inspection
6. Model year
7. Make

D. The certificate of compliance or certificate of waiver shall be submitted to the County assessor with the application for Arizona certificate of title and registration (DOT 48-0510) or an Arizona registration card (DOT 48-5113) at the time of registration for re-registration as evidence of meeting the requirement of this article.

E. Certificates of compliance or certificates of waiver will not be replaced if lost.

R9-3-1012. Inspection procedure and fee

A. Each vehicle that is inspected by a State station must be accompanied by a document such as registration, certificate of title, or bill of sale which identifies the vehicle by make, model, year, identification number and license number if applicable.

B. The fee for an emissions inspection at a State station is $5.00 payable in cash at the time of inspection to the contractor unless the vehicle qualified for an inspection without charge as specified in Section R9-3-1013, or when the fee has been prepaid to the contractor.

C. All inspection fees collected by the contractor shall be forwarded to the director for each billing period with the invoice for the billing period.

D. State station emissions inspectors shall not recommend repairs or repair facilities

R9-3-1013. Reinspections

A. Each vehicle which fails its initial inspection is entitled to the first reinspection at no additional charge under the following conditions:

   1. Within sixty consecutive calendar days of the initial inspection but not thereafter.

   2. Emission related repairs or adjustments have been made.

   3. The vehicle is accompanied by the entire inspection report with the following information filled in on the reverse side:

      a. Repairs made

      b. Cost of repairs

      c. Name of activity or person making repairs

      d. Signature of person certifying repairs.

B. A vehicle that fails the reinspection at no additional charge and does not qualify for a waiver under R9-3-1008 shall be provided an inspection report and an inspection report supplement.

C. A vehicle not qualifying for a waiver at the time of reinspection may qualify for a waiver on subsequent reinspection provided the conditions of paragraph R9-3-1008.B. are met.

R9-3-1014. Waiver surveillance

A. When a vehicle fails reinspection and it is determined that the repairs required by Section R9-3-1010 have not been accomplished as certified on the initial vehicle inspection report, the certificate of waiver may be withheld as follows:

   1. By contractor station management when there is personal knowledge that the required repairs have not been performed or the vehicle operator states that the required repairs have not been performed and there is no intent to perform the repairs prior to retest.

   2. By a state inspector when there is less than a 40 percent improvement in emissions and evidence of required repairs is not provided by receipts of purchase or the state inspector determines by an underhood inspection that the required repairs were not performed.

R9-3-1016. Licensing of inspectors

A. No person will be licensed as a vehicular emissions inspector unless he has demonstrated his competence to the bureau by such examination, training, or other standards as the Director may approve.

B. Applications will be obtained from, and approved by, the bureau.

C. All completed applications will be returned to the bureau.

D. Any vehicular emissions inspector inspecting a diesel-powered vehicle as prescribed herein must have successfully completed an approved training course for visually reading opacity with the unaided eye within the last six months or most use an opacity meter as prescribed in R9-3-1006.

E. Licenses issued to vehicular emissions inspectors shall be renewed annually on or before December 31, except that no license shall be renewed twice in any calendar year.

F. Applications for renewal of vehicular emissions fleet inspector's licenses shall be submitted thirty days prior to the current license expiration date.

G. The Department may suspend, revoke, or refuse to renew the license if an applicant has violated any provision of this article.

H. A vehicular emissions inspector shall inform the department of any change in his employment status within seven days of such change.

I. Each vehicular emissions inspector shall be assigned a single, unique, non-transferable inspector's number. No vehicular emissions inspector shall be assigned more than one inspector's number during his lifetime.

R9-3-1017. Inspection of Governmental vehicles

A. Inspection of Governmental vehicles operated in Pima and Maricopa Counties shall be conducted in any of the following methods:

1. As cooperatively scheduled by the Bureau at the Bureau station
2. At a fleet station operated by the governmental entity or
3. At a State station upon payment of the fee.

B. All governmental vehicles except Federally owned vehicles which are excluded from the definition of motor vehicles pursuant to Section 85.1703 Title 40 Code of Federal Regulations, shall be inspected in accordance with this Article and shall have an inspection sticker affixed to the vehicle when found to be in conformance with State inspection requirements.

1. All inspection stickers shall be validated by a vehicular emissions inspector prior to installation upon the vehicle. Validation shall be by punching out the current month and year following inspection. This will designate when the vehicle is due for its next annual inspection.
2. All motorcycles with a frame fork head shall have the sticker affixed to the vehicle's frame fork head.
3. All other vehicles when practicable shall have the inspection sticker affixed to the lower left hand exterior corner of the motor vehicle rear window. The left hand corner shall be determined from a position facing the window from outside the vehicle.
4. When it is impracticable to affix the inspection sticker to the lower left hand corner of the rear window, the sticker shall be affixed to the lower left hand corner of the windshield if so equipped when viewed from the driver's position or to some other readily visible location. On Federally owned military vehicles where it is inappropriate to attach the inspection sticker, the inspection sticker may be entered in the vehicle log book.

C. The inspection stickers shall be supplied by the bureau at no charge to the government entity.

D. All inspection stickers shall be designed, issued, and administered, subject to conditions as the director deems necessary to ensure compliance with these rules and regulations. The Bureau shall be the only source of supply for inspection stickers.

E. Governmental entity fleet stations shall inspect all their fleet vehicles in accordance with R9-3-1019 except that no certificate of inspection shall be used for Governmental vehicles and that inspection stickers shall be affixed to the vehicles.

R9-3-1018. Certificate of inspection

A. Certificates of inspection shall be used by a fleet station other than Governmental entity fleet station as evidence that its vehicles have met requirements of this Article.

B. A Certificate of inspection shall provide the following information:

1. Vin
2. Model year
3. License number
4. Purpose of inspection
5. Owner of vehicle
6. Date of expiration
7. Fleet station permit number
8. Inspector's signature and number

R9-3-1019 Fleet operator qualifications, procedures, and permits

A. All fleet vehicles for which a fleet station permit has been issued shall be inspected as specified in Section R9-3-1005, while the vehicles are part of the fleet.

B. The exhaust emission inspection conducted on non-diesel-powered vehicles by a fleet station may consist of the loaded mode test or the idle mode test.

1. If the idle mode test is used by a fleet station, idle speed shall be adjusted to manufacturer's specifications if it deviates from the specified value by more than plus or minus 100 r.p.m.

C. Diesel-powered vehicles shall be inspected as prescribed in Subsections R9-3-1006.E. and F.

D. The following apply to permits for fleet stations:

1. Any registered owner or lessee of a fleet of twenty-five or more non-exempt vehicles whose place of business is located in Maricopa or Pima County may apply to the Director for a permit to establish a fleet station. The Director will not issue any fleet station permit until he has found that the applicant:

a. Maintains an established facility for the repair and maintenance of the applicant's fleet of vehicles which meets the following requirements:

i. The repair facility must be exclusively rented, leased or owned by the fleet operator.

ii. If the facility is for the repair of gasoline-powered vehicles, the following equipment shall be owned or leased by the fleet operator or his employees and in good working condition.

(1) Ignition timing light with timing advance tester.

(2) Ignition operated tachometer

(3) Dwell meter

(4) Socket tool for replacing spark-plugs

(5) Spark-plug gap setting tool

(6) Tools for replacing carburetors, distributors, fuel pumps, and ignition coils

iii. If the facility is for the repair of diesel-powered vehicles, the following equipment shall be owned by or leased by the fleet operator or his employees and in good working condition.

(1) Tools for removing fuel pumps and injectors

(2) Fuel pressure gauge

(3) Tools required by the vehicle manufacturer for field setting of fuel injectors, inlet and exhaust valve clearance, governors, and throttle controls.

b. Provides a person who, for salary or compensation, performs tune-ups of engines and replacement or repair of carburetion and ignition components or diesel fuel systems of engines in the vehicle fleet.

c. Provides a tract of land with a building or part of a building devoted principally to maintaining or repairing the fleet's motor vehicles. Such a space shall be of sufficient area to conduct maintenance or repair of at least one fleet motor vehicle.

d. Has obtained the CO and HC emissions analyzer conforming to the requirement of Subdivision R9-3-1006.A.2.a.vii. to conduct the required inspections or has entered into an agreement with the contractor to have the required inspection performed at a State station to provide the required inspections.

e. Employs a licensed vehicular emissions inspector who will perform the necessary inspections or has entered into a separate agreement with a State station to provide the inspections. This inspector may be the same person required by Subparagraph b.

f. Agrees to provide information to the bureau as prescribed in this section.

2. Vehicles previously registered and owned by a dealer may be considered part of the dealer's vehicle fleet. The dealer's business inventory that exists at the time of inspection of the dealer's fleet for approval of application by the Bureau shall be used to determine compliance with Paragraph D.1.

3. Applications forms may be obtained from the Bureau.

4. All completed applications shall be submitted to the Bureau.

5. Before an original application for a fleet station permit is approved, an inspection of the premises will be made by State Inspector.

6. A fleet station shall not inspect or certify vehicles not owned or leased by the fleet owner unless under a contract with the contractor operating a State station.

7. A fleet station permit shall expire one year from date of issuance.

8. The fleet station permit may be renewed by submittal of a renewal application to the Bureau thirty days prior to expiration.

9. A fleet station permit shall only be applicable to the fleet's inspection facility located at the address shown on the fleet station permit. If a fleet owner wishes to have a permit for inspection facilities at more than one address, then separate permits must be obtained for each facility.

10. Fleet station permits issued by the Director are not transferable.

11. When permit name or address changes do not involve a change of ownership, the permit shall be returned to the Bureau for cancellation and a new permit application form shall be submitted. The Director will cancel the returned permit and issue a new permit for the unexpired term.

12. In the event of loss, destruction, or mutilation of the permit, the person to whom it was issued may obtain a duplicate upon furnishing satisfactory proof of the fact. Any fleet that loses a fleet station permit issued by the Director, and after obtaining a duplicate finds the original, shall immediately surrender the original permit to the Bureau.

13. Persons whose permits have expired shall immediately cease the activity requiring a permit, but the Bureau shall accept applications for renewal during the thirty-day period following the date of expiration. In no case may a permit be renewed where application is received more than thirty days after the date of expiration: In such cases, an application for a new permit will be required.

14. A fleet station which does not have a vehicular emissions inspector in its employ or does not have a separate agreement with a State station to provide the inspections, shall immediately cease to operate as a fleet station.

15. When a fleet station permit is surrendered, suspended, or revoked, all unused vehicle certificates of inspection shall be returned to the Bureau for a refund.

16. Surrender of a permit shall not deprive the Department of jurisdiction from carrying out investigative or disciplinary proceedings against the permit holder for violations prior to surrender.

E. The Director may suspend, or revoke a fleet station permit in accordance with ARS §§36-1776F and 41-1001 et seq. if the permittee or officer, employee or any partner thereof:

1. Violates any provision of this article.

2. Has misrepresented a material fact in obtaining a permit.

3. Fails to make and keep records showing vehicles tested as a permittee, or fails to submit such records to the Bureau.

4. Fails to maintain conformance with all qualifying requirements of Subsection D.

F. The fleet station permit and licenses of all inspectors employed at the station shall be prominently displayed within the station.

G. A written notification must be submitted to the Bureau by the fleet station operator within seven days of any change of the employment status of the fleet station's vehicular emissions inspector.

H. The inspection equipment shall be as follows:

1. Each fleet station shall be equipped with emission analyzers and positive crankcase ventilation testers which meet the specifications contained in R9-3-1006. Only the equipment required to test the types of vehicles in the fleet inventory will be required in the fleet stations.

2. All test equipment and instrumentation shall be maintained in good condition. Instruments requiring periodic calibration shall be calibrated in accordance with instructions and recommendations of the instrument or equipment manufacturer except that recommendations by the Bureau for calibration or intervals between calibration may be a condition of the fleet station permit and shall supercede any and all other conflicting recommendations. A record of calibrations performed on each instrument shall be maintained by the fleet station indicating the date and authentication of the technician performing the previous calibration.

3. The instrument calibration records will be subject to review by the Bureau.

4. Working gases used by the fleet station shall be subject to analysis and comparison to the Bureau's standard gases at any time.

5. Fleet station equipment shall be subject to both scheduled and unscheduled checks for accuracy and condition by the Bureau.

I. Certificates of Inspection shall be processed as follows:

1. A certificate of inspection shall be completed and issued for a vehicle after the vehicle has passed the mandatory vehicular emissions inspection.

2. The expiration date shall be one year from the date that the vehicle has passed the mandatory vehicular emissions inspection.

3. All information required on the certificate of inspection shall be entered with sufficient pressure to ensure that all copies of the certificates are legible.

4. Any certificates of inspection that are incorrect shall have all corrections authenticated by the initials of the vehicular emissions inspector. Voided or unusable certificates shall be presented to the Bureau for replacement without charge.

5. Only the vehicular emissions inspector may sign a certificate of inspection.

6. The original completed certificate will be presented to the County Assessor's office for processing of the vehicle's application for title and registration or Arizona registration card.

7. The second copy of each completed certificate of inspection shall be forwarded to the Bureau within three weeks after completion of certificate.

8. The County Assessor shall accept the signed certificate as evidence that the vehicle is a fleet inspected vehicle and has met the State's inspection requirements if the certificate is complete and the expiration date has not passed.

9. Certificates may be obtained from the Bureau. Normally the number of certificates purchased shall be sufficient to meet the requirements of the fleet for one year. If the number of vehicles to be inspected by the fleet station is reduced after purchase of the certificates and before their use, the excess certificates may be returned to the Bureau for refund or used in subsequent years.

10. The charge for certificates is one dollar each. The payment for the certificates shall be included with the application for certificates. Checks are to be made payable to the Arizona Department of Health Services.

11. Only the Bureau shall sell or othervise transfer certificates of inspection.

12. The fleet station operator shall be held responsible for the security and accountability of all his certificates.

13. In the event that any certificates are lost or stolen, the fleet station operator shall notify the Bureau in writing within twenty-four hours and indicate the number of certificates lost and their serial numbers. Refusal or failure to report lost certificates shall be grounds for revoking a fleet station permit.

J. The following data shall be compiled by the fleet station for each vehicle inspected and retained for one year from the date of inspection.

1. The vin
2. The vehicle's license number, where applicable
3. The HC content of the undiluted exhaust (for non-diesel-powered vehicles only)
4. The CO content of the undiluted exhaust (for non-diesel-powered vehicles only)
5. Maximum smoke opacity reading (for diesel-powered vehicles only)
6. The vehicle model year
7. The vehicle make
8. The date of inspection
9. The license number of the vehicular emissions inspector conducting the inspection
10. The third copy of the certificate of inspection issued to the vehicle
11. Estimated curb weight of the vehicle.

K. Failure to maintain the inspection data specified above shall be reason for revocation of the fleet station permit.

L. Upon his request a State inspector shall be allowed access to any or all of the above inspection data.

M. Fleet vehicles may be subject to reinspection by state inspectors.

N. A waiver may be issued pursuant to Subsection R9-3-1008.B. by a fleet inspector.

1. A fleet inspection waiver report shall be forwarded to the Bureau within three working days from the date of issue. A fleet inspection waiver report will be provided with the purchase of each certificate of waiver.

2. Certificates of waiver may be obtained from the Bureau for one dollar each.

R9-3-1020 State stations acting as fleet inspection stations

A. State stations may provide inspection services to a holder of a fleet station permit under a separate agreement between the contractor and the holder of a fleet station permit.

B. The State shall not collect or be billed for any inspection fees for any fleet station vehicle inspected under an agreement with the contractor.

C. When a State station is providing inspection services to the holder of a fleet station permit, that portion of the facility being used shall be considered to be operating only as a fleet station and shall be subject only to those requirements except that a fleet station permit is not required as long as the same emission analyzers and dynamometers (if required) are used as when operating as a State station.

D. Certificates of inspection must be purchased from the Bureau by the holder of the fleet station permit and provided to the State station. These certificates must then be used by the State station in accordance with the requirements for fleet stations.

E. The holder of the fleet station permit shall be responsible for maintaining a copy of all used certificates of inspection for a minimum period of one year after the vehicle inspection. These copies shall be available for inspection by the Bureau at all times.

F. Certificates of inspection shall be filled out at the time of inspection by State stations operating as fleet stations in the same manner required of fleet operated fleet stations.

R9-3-1021 Inspections conducted by fleet inspection stations for State stations

A. The contractor may subcontract with the holder of a fleet station permit for the fleet station to perform mandatory vehicular emissions inspections for the State. Nothing in such a contract shall relieve the contractor from the provisions of its contract with the State.

B. Any fleet station performing the inspections for a State station shall be subject to all the rules and regulations applying to the State station.

R9-3-1022. Procedure for waiving inspections due to technical difficulties

A. Any vehicular emissions inspector employed by an official emissions inspection station may issue a Director's certificate for any vehicle that cannot be subjected to the inspection required by this Article because of technical difficulties inherent in the manufacturer's design or construction of the vehicle. A copy of the completed Director's certificate shall be forwarded to the Bureau.

B. The form for the Director's certificate will be supplied by the Bureau.

R9-3-1023. Certificate of exemption

A. When a vehicle being registered or reregistered in Maricopa or Pima County will not be available for inspection within the State during the ninety day period prior to the registration or reregistration expiration date, the owner or his agent may apply in writing to the Bureau for a certificate of exemption

B. The owner or his agent shall complete the affidavit portion of the certificate of exemption form and submit it to the County Assessor as evidence of meeting the requirements of this article.

R9-3-1025. Inspection of State stations

A. The automatic emission analyzers used by State stations shall be inspected for accuracy by the Bureau at least twice within each 30-day period using field calibration gases named by the Bureau. Manual analyzers shall be inspected at least once every ninety days.

B. A State inspector shall deliver the field calibration gases to a designated employee of the State station. The employee shall then introduce the gases into the State station emissions analyzers and the output readings of the analyzers shall be witnessed and recorded by the State inspector. A copy of the results shall be given to the designated State station employee at the completion of the inspection. The field calibration gases shall be introduced through the analyzer's calibration port or the sampling probe at the State inspector's prerogative.

C. If the field calibration gases indicate that a State station analyzer is not operating within tolerances prescribed in this article, the State inspector or the State station designated employee may request that the state station's calibration gases be immediately introduced into the subject analyzer and the results recorded.

Cap 58 -58-

D. A state inspector shall not retire a state stations emission analyzer until approved by the Bureau Chief or his designated representative.

E. The state inspector shall report all state station analyzer discrepancies to the Bureau immediately. The Bureau may take any of the following actions:

1. Retirement of the analyzer from service until proper repairs are made
2. An immediate calibration of the discrepant analyzer using the state station working gases
3. A check of the field calibration gases by the Bureau
4. A check of the state stations working gases by the Bureau

F. If the Bureau Chief, or his designated representative determines that a state station analyzer should be retired from service until repaired, he shall direct the contractor to retire the subject analyzer immediately and the contractor shall provide the Bureau the inspection number of the last vehicle inspected prior to retiring the analyzer. All oral directives by the Bureau Chief shall be confirmed in writing promptly.

G. Any state station analyzer retired by the Bureau Chief or his designated representative may be returned to service upon its repair and calibration. The Bureau shall be notified immediately upon its return to service, and the contractor's calibration results of the subject analyzer shall be supplied to the Bureau.

H. All state station automatic analyzers shall be calibrated at least once each week and the calibration records shall be submitted to the Bureau on a monthly basis. The following information shall be included in the records as a minimum:

1. Lane and station location of the analyzer
2. Concentration of calibration gases used
3. Reading obtained with each calibration gas before adjustments are made
4. Date of calibration check
5. Signature of technician performing the calibration check.

I. The Bureau shall verify that the state station's dynamometers meet the speed and loading tolerances as prescribed in this article at least once within each three months. The dynamometers will also be inspected in a manner not requiring removal of any of its parts or its associated equipment other than inspection panels.

R9-3-1026. Inspection of fleet stations

A. State inspectors will check the calibration of emission analyzers used by the fleet stations for the inspection with the field calibration gases at least once within each three months.

B. A fleet station emissions analyzers shall not be used for an official emissions inspection if it does not read the State's field calibration gases within the tolerances prescribed by this section, if there is a leak in the sampling systems or the calibration fort, or if the sample handling system is restricted.

C. The fleet station shall be responsible for calibration of the fleet station emission analyzer.

D. A state inspector may, at his discretion, allow an employee of the fleet station, or someone other than a state inspector and authorized by the fleet station, to calibrate the analyzer utilizing the state's field calibration gases.

E. Any repairman for a fleet station emission analyzer may purchase his own calibration gases from any private source and submit them to the Bureau to have their HC and CO concentrations assigned by the Bureau.

F. A state inspector shall tag a fleet station emission analyzer upon his determining that the analyzer does not meet the requirements of this section. Such analyzer shall not be used for inspection until the tag is removed by a state inspector. This analyzer failure tag shall be affixed to the analyzer in such a manner that the tag cannot be removed without breaking a seal or mutiliting the tag. The tag shall contain the following informtion as a minimum:

   1. A brief statement that the analyzer does not meet state operating requirements for official emissions inspection purposes.

   2. The values of the state field calibration gases used and the analyzer readings obtained.

   3. The date of the state's inspection.

   4. The signature of the state inspector tagging the analyzer.

   5. The reason for tagging.

G. An analyzer tagged in accordance with subsection F of this section shall not be returned to service until its accuracy is verified by a state inspector.

H. All fleet stations are responsible for periodic maintenance and calibrations of their emissions analyzers. Repair and maintenance requirements are prescribed in R9-3-1019.

I. A fleet station may lease or borrow an emission analyzer for temporary use while the station's approved analyzer is being repaired provided that a state inspector has approved its use.

J. All fleet station emission analyzers used for the inspections are required to read the field calibration gases within the following tolerances:

1. Within plus 0.50% CO to minus 0.25% CO in the range from 0 to 2% CO

2. Within plus 1.00% CO to minus 0.50% CO in the range from 2% to 10% CO

3. Within plus 60 PPM HC to minus 30 PPM HC in the range from 0 to 500 PPM HC when read as N-hexane

4. Within plus 200 PPM HC to minus 100 PPM HC in the range from 500 to 2000 PPM HC when read as N-hexane.

R9-3-1027. Registration of repair industry analyzers

A. Any equipment repair facility or individual who calibrates HC or CO exhaust emission analyzers may purchase calibration gases from a supplier of his choice, and submit these gases to the Bureau to their HC and CO concentrations assigned.

B. An automotive repair facility may apply to the Bureau at no charge for registration of NDIR HC and CO analyzers that are used in the repair or adjustment of vehicles pursuant to Sections R9-3-1008 and R9-3-1010.

C. Calibration must be verified by a state inspector before an analyzer may be registered. It will be registered if the analyzer reads the value of the field calibration gases within the following tolerances:

1. Plus 0.50% CO to minus 0.25% CO in the range from 0 to 2% CO.

2. Plus 1.00% CO to minus 0.50% CO in the range from 2% to 10% CO.

3. Plus 60 PPM HC to minus 30 PPM HC in the range from 0 to 500 PPM HC when read as N-hexane.

4. Plus 200 PPM HC to minus 100 PPM HC in the range from 500 to 2000 PPM HC when read as N-hexane.

D. Each registered analyzer used by a repair facility shall have a unique registration number assigned by the Bureau. A file will be kept by the Bureau on each analyzer which contains the following information:

1. The manufacturer's serial number
2. The manufacturer's make and model
3. The name and address of the repair facility using the analyzer
4. The date of the analyzer's last inspection by the Bureau and whether it complied with State tolerances.

E. A State inspector shall tag a registered analyzer upon determining that the analyzer does not meet the requirements of this section. Such analyzer shall not be used for program purposes until the tag is removed by a State inspector.

F. The tag will be removed by a State inspector after the analyzer accuracy is verified.

R9-3-1029. Vehicle emission control devices

For the purpose of ARS § 36-1717, each registered motor vehicle shall have in operating status and condition all emission control devices which were installed by the vehicle manufacturer to comply with federal requirements for motor vehicle emissions or equivalent replacement parts or devices.

R9-3-1030. Visible emissions: Diesel-powered locomotives

No person shall cause, suffer, allow or permit discharge into the atmosphere from any diesel powered locomotive any visible air contaminant for a period greater than 40 consecutive seconds which is of an opacity greater than 40%, except under the following conditions:

1. For a period of four consecutive minutes or less when a locomotive engine is under load after a period of idle.
2. For a period of 30 consecutive minutes or less when starting a cold engine.
3. For periods of three consecutive minutes or less and an aggregate of not more than ten minutes in any one hour when a locomotive engine is being tested, adjusted or broken in after being rebuilt or repaired.
4. At altitudes exceeding 5,000 feet 50% opacity shall apply.

PERMIT RULES

(3.0)

R9-3-1203 REVOCATION, SUSPENSION OR MODIFICATION OF INSTALLATION AND OPERATING PERMITS

If the Director determines that the terms and conditions of an installation or operating permit are being violated or that the permit was obtained by fraud or misrepresentation, he may petition the hearing board to have the permit revoked or suspended. When circumstances warrant the Director may petition the hearing board to have an installation or operating permit modified.

R9-3-1204 PERMIT NONTRANSFERABLE; EXCEPTION

A. An installlation permit or an operating permit shall not be transferable, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another, or from one person to another.

B. This regulation shall not apply to mobile or portable machinery or equipment which is transferred from one location to another provided that the owner or operator of such equipment notifies the Director in writing of the transfer at least ten days before the transfer. The notification required under this paragraph shall include:

1. A description of the equipment to be transferred including the operating permit number for such equipment;
2. A description of the present location;
3. A description of the location to which the equipment is to be transferred, including the availability of all utilities, such as water and electricity, necessary for the proper operation of all control equipment;
4. The date on which the equipment is to be moved; and
5. The date on which operation of the equipment will begin at the new location.

R9-3-1205 POSTING OF PERMIT

A person who has been granted an operating permit shall firmly affix such permit, an approved facsimile of such permit, or other approved identification bearing the permit number upon such equipment for which the operating permit is issued in such a manner as to be clearly visible and accessible. In the event that such equipment is so constructed or operated that such permit cannot be so placed, the permit shall be mounted so as to be clearly visible in an accessible place within a reasonable distance of such equipment or maintained readily available at all times on the operating premises.

R9-3-1206 NOTICE BY BUILDING PERMIT AGENCIES

A. All agencies of the county or political subdivisions of the county that issue or grant building permits or approvals shall examine the plans and specifications submitted by an applicant for a permit or approval to determine if an air pollution installation permit will possibly be required under the provisions of these rules and regulations. If it appears possible that such installation permit will be required, the agency shall give written notice to such applicant to contact the Director and shall furnish a copy of such notice to the Director.

R9-3-1207 EQUIPMENT COVERED

The provisions of R9-3-1201 through R9-3-1206 apply to any piece of equipment, machine, incinerator, device or other article which may cause or contribute to air pollution or the use of which may eliminate or reduce or control the emission of air pollutants, but does not include motor vehicles, agricultural vehicles or agricultural equipment used in normal farm operations, or to fuel-burning equipment which, in the aggregate with such other equipment of the applicant at the same location or property other than a one or two-family residence, is rated at less than five hundred thousand British thermal units per hour.

R9-3-1209 PERMIT FEES

A. Prior to the issuance of an installation or operating permit or renewal of an operating permit for any equipment for which a permit is required under R9-3-1201, the applicant shall pay to the Director a fee in the amount set forth in Appendix 4 to this part.

B. Every applicant for the issuance or renewal of a conditional permit shall pay to the Director a fee in the amount set forth in Appendix 5 to this part.

APPENDIX 4

FEE SCHEDULE FOR INSTALLATION AND OPERATING PERMITS

1. Major Sources as defined by Reg. 7-1-8.1, paragraph 1 (other than those covered by paragraph 2 of this Appendix).

	PERMIT FEE - DOLLARS	
	Inst In/Renew Operating	Operating
a. Copper Smelters	1800	3600
b. Copper Smelter with SCS system	2500	5000
c. Copper Ore extraction and processing operations	1500	3000
d. Oil Refineries	1750	3500
e. Power Generating Installations (using solid of liquid fossil fuel)	1.5 per megawatt (rated capacity)	3.0 per megawatt (rated capacity)
f. Cement and Lime Manufacturing Plants	1600	3200
g. Process Industries (not covered above)	1500	3000
h. Other Major Sources (not covered above)	1300	2600

2. Portable Sources as defined by Reg. 7-1-8.1, paragraph 4.

	PERMIT FEE - DOLLARS	
	Inst In/Renew Operating	Operating
a. Asphalt Heater - Planer Units	140	280
b. Hot-Mix Asphalt Pavement Mixing Plant	300	600
c. Rock, Sand and Gravel Crushing and Screening Plants	140	280
d. Earth Conveyor Belt Systems	40	40
e. Other Portable Sources (not covered above)	35	35

3. Stationary Sources (other than Major Sources covered by paragraph 1 of this Appendix).

cap In

space between first and [illegible] ←

	PERMIT FEE Inst In/Renew Operating	DOLLARS Operating
a. Cement Manufacturing	500	1000
b. Coal Mining (Anthracite, Bituminous and Lignite)	500	1000
c. Electric Energy Equipment (except Electric Motors) based on total Kilovolt Amperes (KVA) ←		
Kilovolt Amperes (MVA)		
Up to and including 45	7	14
Greater than 45 but less than 145	12	24
Greater than 145 but less than 450	25	50
Greater than 450 but less than 1450	35	70
Greater than 1450 but less than 2500	50	100
Greater than 2500 but less than 4500	75	150
Greater than 4500 but less than 14,500	100	200
Greater than 14,500	135	270

d. Fuel Burning Equipment (except as covered by Schedule below) based on total Design Fuel Consumption using Gross Input Heating Values

cap In space ←

BTU Per Hour	PERMIT FEE - Inst In/Renew Operating	DOLLARS Operating
500,000 or greater but less than 1,500,000	25	50
1,500,000 or greater but less than 5,000,000	35	70
5,000,000 or greater but less than 15,000,000	75	150
15,000,000 or greater but less than 50,000,000	100	200
50,000,000 or greater	135	270

e. Fuel Burning Equipment Using Natural Gas Liquid Petroleum Gas based on total Design Fuel Consumption using Gross Input Heating Values

BTU Per Hour		
500,000 or greater but less than 1,000,000	10	20
1,000,000 or greater but less than 5,000,000	20	40
5,000,000 or greater	50	100

f. Hot-Mix Asphalt Pavement Mixing Plant	300	600

space between [illegible]

cap-line space

		PERMIT FEE - DOLLARS	
g.	Incinerators: Grate Area in Square Feet	Inst In/Renew Operating	Operating
	4 or less	10	20
	Greater than 4 but less than 9	20	40
	9 or greater but less than 27	50	100
	27 or greater	75	150
h.	Iron and Steel Foundries	500	1000
i.	Lime Manufacturing	500	1000
j.	Metal Ore Mining, Dressing and Beneficiating	500	1000
k.	Motors - Engine Based on Total Horsepower or the Equivalent of all Motors and Engines including, but not limited to, Gasoline, Diesel, Natural Gas, Liquid Petroleum Gas, and Electricity Utilizing Engines		
	Horsepower		
	Up to and including 5	7	14
	Greater than 5 but less than 15	12	25
	15 or greater but less than 30	25	50
	30 or greater but less than 45	35	70
	45 or greater but less than 65	50	100
	65 or greater but less than 125	75	150
	125 or greater but less than 200	100	200
	200 or greater	135	270
l.	Nitric Acid Manufacturing	500	1000
m.	Perlite - Expanding	500	1000
n.	Petroleum Refineries	500	1000
o.	Power Generating (Fossil Fuel)	1.5 per megawatt (rated capacity)	3 per megawatt (rated capacity)
p.	Rock, Sand and Gravel Crushing and Screening Plants	140	280
q.	Sawmills and Planing Mills (with Tepee Burners	500	1000
r.	Secondary Smelting and Refining of Nonferrous Material	500	1000

s. Storage Reservoirs, Stationary Tanks or Other Containers as defined in Regulation 7-1-5.1

Gallons		
Greater than 65,000 but less than 40,000	35	70
400,000 or greater but less than 4,000,000	50	100
4,000,000 or greater	75	150
t. Sulfite Pulp Mills	500	1000
u. Sulfuric Acid Plants (as defined by Reg. 7-1-5.4)	500	1000
v. Other Stationary Sources (not listed above)	35	35

4. Individual Items of Equipment

Unit of Equipment	PERMIT FEE - DOLLARS Installation
a. Cement Kiln, including Clinker Cooler, Major Source	750
b. Cement Kiln, including Clinker Cooler, other than Major Source	225
c. Copper Smelter Reverberatory Furnace or equivalent	400
d. Copper Smelter Convertor	175
e. Copper Smelter Roaster	125
f. SCS System for Copper Smelter	1000
g. Lime Kiln, Major Source	700
h. Lime Kiln, other than Major Source	200
i. Air Pollution Control Equipment based on Design Air Volume through the Device Dry Inertial-type Collectors (including Cyclones)	
Volume, 9 cfm up to 100,000	0.60 per thous. acfm
100,000 or greater but less than 200,000	0.75 per thous. acfm
200,000 or greater	0.85 per thous. acfm

[illegible] circle on orig

j.	Fabric Filters, Electrostatic Precipitators and Wet Collectors	
	Volume, acfm up to 100,000	1.25 per thous. acfm
	100,000 or greater but less than 200,000	1.50 per thous. acfm
	200,000 or greater	1.75 per thous. acfm
k.	Other, all Equipment not specified above	35

APPENDIX 5

FEE SCHEDULE FOR CONDITIONAL PERMIT

Major Sources as defined by Reg. 7-1-8.1, paragraph 1 (other than those sources covered by paragraph 2 of this Appendix)

		PERMIT FEE - DOLLARS	
		Issuance	Renewal
a.	Copper Smelters	2625	1325
b.	Power Generating Installation	3.0 per megawatt (Rated Capacity)	1.5 per megawatt (Rated Capacity)
c.	Process Industries (not covered above)	2250	1125
d.	Other Major Sources (not covered above)	1800	900

Portable Sources as Defined by Reg. 7-1-8.1, paragraph 4

		PERMIT FEE - DOLLARS	
		Issuance	Renewal
a.	Asphalt Heater - Planer Units	150	150
b.	Hot-Mix Asphalt Pavement Mixing Plant	450	75
c.	Rock, Sand and Gravel Crushing and Screening Plants	210	150
d.	Other Portable Sources (not covered above)	150	150

Stationary Sources (other than major sources covered by paragraph 1 of this Appendix)

		PERMIT FEE - DOLLARS	
		Issuance	Renewal
a.	Power Generating Installation	975	500
b.	Process Industries	750	375
c.	Other Stationary Sources (not covered above)	100	150

RULES AND REGULATIONS

COCONINO DEPARTMENT OF PUBLIC HEALTH

SECTION 12-1 GENERAL

REG. 12-1-1 LEGAL AUTHORITY

The regulations in this chapter are adopted pursuant to the authority granted by Sections 36-770, 36-773, and 36-779, Arizona Revised Statutes.

REG. 12-1-2 DEFINITIONS

a. Advisory Council means the Coconino County Air Pollution Advisory Council appointed by the Coconino County Board of Supervisors.

b. Air contaminant means and includes smoke, vapor, charred paper, dust, soot, grime, carbon, fumes, gases, sulfuric acid-mist aerosols, aerosol droplets, odors, particulate matter, windborne matter, radio-active materials, noxious chemicals, or any other airborne solid, liquid, or gas which is foreign to the natural outdoor atmosphere.

c. Air pollution means the presence in the outdoor atmosphere of one or more contaminants or combinations thereof in quantities which, by reason of their concentration, duration, or both, are or tend to be injurious to human, plant, or animal life, or cause damage to property, or unreasonably interfere with the comfortable enjoyment of life or property of a substantial part of a community, or obscure visibility, or in any way degrade the quality of the ambient air below the standards established by the Board of Supervisors.

d. Approved means approved in writing by the Coconino County Air Pollution Control Officer or his authorized representative.

e. Control Officer means the Director of the Coconino County Department of Public Health.

f. Discharge means the release, escape, or emission of an air contaminant into the atmosphere so as to cause or contribute to air pollution.

g. Hearing Board means the Coconino County Air Pollution Control Hearing Board appointed by the Coconino County Board of Supervisors.

h. Incinerator means an apparatus, device, container, or assemblage of equipment in which combustible wastes are disposed of by burning.

i. Opacity means the degree or extent to which the ambient atmosphere at a source of air pollution is made impervious to rays of light. As used in these regulations, opacity refers to the obscuration of an observer's view by air contaminants.

j. Open Burning means the combustion of material of any type under conditions where the products of combustion emitted into the atmosphere are not directed through a flue, stack, or chimney.

k. Particulate matter means discrete material particles of any kind, other than uncombined water, which are carried in, suspended in, or discharged into the atmosphere as liquids or solids.

l. Person means any public or private corporation, company, partnership, firm, association, or society of individual persons, the federal government or any of its departments or agencies, the state or any of its agencies, departments, or political subdivisions, as well as a natural person.

m. Process weight means the total weight of all materials introduced into an industrial operation or process, exclusive of liquid and gaseous fuels and air used to support combustion.

n. Process weight per hour means the total process weight for an entire period of operation, or for a typical portion thereof, divided by the number of hours in each such period or typical portion thereof.

o. Ringelmann Smoke Chart means the Ringelmann scale for grading the opacity, appearance, density, or shade of a discharge, or any chart, recorder, indicator, or device for the measurement discharge opacity, shade, or density which is approved by the Control Officer as the equivalent of the Ringelmann scale, as published by the U.S. Bureau of Mines.

p. Smoke means small airborne particles, other than steam or water vapor, discharged into the atmosphere in concentrations sufficient to be visible.

q. Source means any physical facility, arrangement, device, contrivance, condition, or structure which may emit air contaminants.

r. Standard conditions means a gas temperature of 60 degrees, Fahrenheit, and a gas pressure of 14.7 pounds per square inch, absolute. All analyses and test results concerned with air pollution shall be calculated and reported in reference to standard conditions.

REG. 12-1-3 AIR POLLUTION PROHIBITED

a. No person shall cause, suffer, or allow to be discharged or emitted into the atmosphere air contaminants from any source whatever, which in quantity, duration of emission, or in opacity, shade, or appearance exceed the limits specified in subsequent sections of this chapter.

b. Nothing in this chapter shall be interpreted to prevent the discharge or emission of uncontaminated steam or water vapor into the open air.

SECTION 12-2 PERMITS

REG. 12-2-2 OPERATING PERMITS

Before any machine, equipment, incinerator, device, or other article described in paragraph (a), above, in existence or in operation at the time of, or subsequent to, the effective date of this regulation, may be operated or used, an operating permit shall be obtained in writing from the control officer. No such operating permit shall be granted either by the control officer or by the hearing board for any such machine, equipment, incinerator, device, or other article that is or has been constructed or installed without an installation permit until the necessary information is presented to the control officer and such machine, equipment, incinerator, device, or article is altered, if necessary, to conform to applicable standards.

REG. 12-2-4 PERMIT FEES

Permits issued pursuant to this regulation may be issued subject to such terms and conditions as the control officer deems necessary and subject to payment of permit fees, which shall be in accordance with the latest Schedule of Fees, as approved by the Board of Supervisors and kept on file in the office of the County Recorder. Such fees shall be based on the average actual cost of providing services connected with the granting of permits.

REG. 12-2-5 PERMIT RENEWALS

Operating permits issued pursuant to this regulation shall be renewed annually, subject to compliance with provisions of this section, upon payment of an annual renewal fee.

REG. 12-2-7 TESTING OF INSTALLATIONS

Prior to acting on an application for an operating permit, the control officer may require the applicant to provide and maintain such facilities as are necessary for sampling and testing purposes in order to secure information that will disclose the nature, extent, quantity, or degree of air contamination produced by the operation of the machine, equipment, incinerator, device, or other article described in the application. In the event of such a requirement, the control officer shall notify the applicant in writing of the type and characteristics of such facilities.

REG. 12-2-8 COMPLIANCE WITH TERMS OF INSTALLATION PERMIT

In acting upon an application for an operating permit, if the control officer finds that such machine, equipment, incinerator, device, or other article described in Regulation 12-2-3 has not been constructed in accordance with the installation permit, he shall deny the application for such operating permit. The control officer shall not accept any further application for an operating permit for such machine, equipment, incinerator, device, or other article so constructed until he finds that the facility has been reconstructed in substantial compliance with the provisions of the installation permit.

REG. 12-2-9 NOTIFICATION OF DENIAL OF PERMIT

In the event of a denial of an installation permit or an operating permit, the control officer shall notify the applicant in writing of the reasons for such denial. Service of this notification may be made in person or by registered or certified mail, and such service may be proved by the written acknowledgment of the person served or affidavit of the person making the service. The control officer shall not accept a further application unless the applicant has corrected the conditions or omissions cited as reasons for the denial.

REG. 12-2-10 APPEALS TO THE HEARING BOARD

Within ten days after notice is given by the control officer of denial of an installation permit or an operating permit, the applicant may petition the hearing board, in writing, for a public hearing, which shall be held within thirty days after receipt of the petition. The hearing board, after notice and a public hearing, may sustain, modify, or reverse the action of the control officer.

REG. 12-2-11 PERMITS NOT TRANSFERABLE

An installation permit or an operating permit shall not be transferable from one location to another, from one piece of equipment to another, or from one person to another.

REG. 12-2-12 EXPIRATION OF INSTALLATION PERMIT

An installation permit shall expire two years from the date of its issuance.

REG. 12-2-13 POSTING OF PERMITS

A person who has been granted an operating permit shall firmly affix such permit, an approved facsimile of such permit, or other approved identification bearing the permit number upon such machine, equipment, incinerator, device, or other article for which the permit is issued in such a manner as to be clearly visible and accessible. In the event that the permitted facility or device is so constructed or operated that such permit cannot be so placed, the permit shall be mounted so as to be clearly visible in an accessible place within a reasonable distance of such permitted facility or device, or maintained readily available at all times on the operating premises.

SECTION 12-3 CONTROL OF AIR-CONTAMINANT SOURCES

REG. 12-3-1 AMBIENT AIR QUALITY STANDARDS

Coconino County ambient-air quality standards shall be those standards adopted by the Arizona State Board of Health, published in the rules and regulations of the Arizona State Department of Health, and currently in effect. Classifications of air contaminants shall be those included in such ambient-air quality standards.

These standards shall not be construed as permitting the degradation of air quality in any area of the county.

REG. 12-3-2 EMISSION STANDARDS

Coconino County emission standards for air-pollution control shall be those standards for particulate-matter emissions adopted by the Arizona State Board of Health, published in the rules and regulations of the Arizona State Department of Health, and currently in effect.

Notwithstanding such emission standards, no person shall cause the ground-level concentration outside the boundaries of his operation to exceed the limits specified by current ambient-air-quality standards.

REG. 12-3-3 REPORTING OF EMISSIONS

Every person operating machinery, equipment, devices, or other articles which may emit or cause to be emitted air contaminants of such nature, extent, quantity, or degree as may degrade the quality of the ambient air shall submit monthly reports to the control officer giving the exact dates and quantities of pollutants emitted during the preceding month. Reports may be required to include information as to physical outlets, processes and fuels used, and monitoring devices in use, and such other information as is relevant to air pollution and deemed necessary to the board of supervisors.

REG. 12-3-4 PRODUCTION OF RECORDS: CONFIDENTIALITY

When the control officer has reasonable cause to believe that any person is violating any provision of these air-pollution-control regulations or any requirement of an operating or conditional permit issued pursuant to them, he may request, in writing, that such person forhtwith produce all existing books, records, and other documents evidencing tests, inspections, or studies which may reasonably relate to compliance or noncompliance with these regulations.

Any records or other information furnished to or obtained by the board of supervisors or the control officer concerning one or more air-pollution sources, which records and information relate to production or sales figures or to processes or production methods unique to the owner or operator, or which would tend to adversely affect the competitive position of such owner or operator, shall be only for the confidential use of the board of supervisors or the control officer in the administration of these regulations, unless such owner or operator expressly agree to their publication or exposure to the public.

REG. 12-3-5 MONITORING DEVICES

The owner, lessee, or operator of a potential source of air contaminants shall provide, install, maintain, and operate such air-contaminant monitoring devices as are reasonable and required to determine compliance in a manner acceptable to the control officer, and shall supply monitoring information as directed in writing by the control officer. Such devices shall be available for inspection by the control officer during all reasonable times.

REG. 12-3-6 PENALTY FOR VIOLATION

Any person violating the provisions of this section or knowingly or willfully submitting false information reports or records to the board of supervisors or the control officer is guilty of a misdemeanor punishable as provided by ARS 36-789.01.

SECTION 12-4 CONTROL OF AIR CONTAMINANTS

REG. 12-4-1 SHADE, DENSITY, OR OPACITY OF EMISSIONS

No person shall cause, suffer, allow, or permit the discharge into the atmosphere from any single source whatsoever any air contaminant or combination of contaminants for a period or periods aggregating more than three minutes in any one hour which is:

(1) As dark as, or darker than, that shade designated as No. 2 on the Ringelmann Chart, or

(2) Of an opacity equal to or greater than a plume of smoke designated as No. 2 on the Ringelmann Chart (40% opacity).

REG. 12-4-2 DUST CONTROL

a. No person shall cause or permit a building or its appurtenances, a utility, or an open area to be used, constructed, repaired, altered, or demolished without taking all reasonable precautions to prevent particulate matter from becoming windborne or airborne. Dust and other types of particulates shall be kept to a minimum by such measures as wetting-down, covering, landscaping, paving, or treating, or by other reasonable means.

b. No person shall cause or permit the repair, construction, or reconstruction of a road, street, or alley without taking all reasonable precautions to prevent particulate matter from becoming windborne or airborne. Dust and other particulates shall be kept to a minimum by employing temporary paving, dust palliatives, water, or other reasonable means, or by detouring traffic around the construction area.

REG. 12-4-3 PROCESSING OF ANIMAL OR VEGETABLE MATTER

No person shall operate or use any machine, equipment, or other contrivance for the treatment or processing of animal or vegetable matter, separate or in combination, unless all gases, vapors, and gas-entrained effluents from such operation, equipment, or contrivance have been:

(1) Incinerated at temperatures not less than 1,200 degrees Fahrenheit for a period of not less than 0.3 second, or

(2) Processed in a manner determined to be equally effective for the control of air pollution.

All persons owning or responsible for any process involving the reduction of animal or vegetable matter shall provide properly constructed facilities and shall install and maintain in good working order such devices as are necessary to prevent emission of air contaminants.

REG. 12-4-4 VOLATILE AND ODOROUS MATERIALS

Materials such as, but not limited to, solvents, paints, acids, alkalies, pesticides, herbicides, fertilizer, manure, or other volatile or odorous compounds and substances shall be processed, stored, used, and transported in such a manner and by such means that they will not unreasonably evaporate, leak, escape, or be otherwise discharged into the ambient air so as to cause or contribute to air pollution. Where means exist and are available to reduce effectively the contribution to air pollution from evaporation, leakage, or discharge, as determined by the control officer, the installation and use of such control methods, devices, or equipment shall be mandatory.

REG. 12-4-5 STORAGE AND HANDLING OF PETROLEUM PRODUCTS

a. No person shall place, store, or hold in any reservoir, stationary tank, or other container having a capacity of 65,000 or more gallons any gasoline or any petroleum distillate having a vapor pressure of 2.0 pounds per square inch, absolute, or greater, under actual storage conditions, unless such tank, reservoir, or container is a pressure vessel maintaining working pressure sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere, or is equipped with one of the following vaporless control devices, properly installed, and in good working order and in operation:

(1) A floating roof consisting of a pontoon-type or double-deck roof, resting on the surface of the contained liquid and equipped with a seal to close the space between the roof edge and the tank wall.

(2) A vapor balloon, or vapor dome, designed in accordance with accepted standards of the petroleum industry. (The above types of control equipment shall not be used if the contained liquid has a vapor pressure of 11.0 pounds per square inch, absolute, or greater, under actual conditions.)

(3) Other equipment of equal efficiency in preventing the discharge of hydrocarbon vapors and gases to the atmosphere, provided that such equipment is approved by the control officer. All tank gauging and sampling devices shall be gas-tight, except when gauging and sampling is taking place.

b. Any other petroleum storage tank which is constructed or extensively remodeled on or after the effective date of these regulations shall be equipped with a submerged filling device or approved equivalent for the control of hydrocarbon emissions.

c. All facilities for dock loading of petroleum products having a vapor pressure of 1.5 pounds per square inch, absolute, or greater, at loading pressure, shall provide for submerged filling or an approved equivalent method for the control of hydrocarbon emissions.

SECTION 12-5 INCINERATORS

REG. 12-5-1 PERMIT REQUIRED

No incinerator shall be constructed, remodeled, or installed without a permit from the control officer and until the following information has been filed with, reviewed by, and approved by the control officer:

(1) Plans and specifications for the installation, showing capacity, amount and type of waste to be incinerated, proposed auxiliary fuel and fuel controls, fire chamber and stack details, and location of incinerator with reference to adjoining premises.

(2) Loading and unloading procedures and equipment.

(3) Methods and equipment for preventing the discharge of contaminants into the atmosphere.

(4) Receptacles for storage and means for disposal of residues.

(5) Such additional information as the control officer may require.

REG. 12-5-2 PERFORMANCE TESTS: PERMIT TAGS

a. No person shall burn combustible wastes in any incinerator until it has passed performance tests which demonstrate to the control officer that it complies with these regulations, and particularly with the emission requirements of Regulation 12-5-3.

b. The control officer shall affix to the incinerator a permit tag which shall not be removed by anyone other than the control officer or his agents, and then only for appropriate cause.

REG.12-5-3 EMISSION LIMITATIONS

a. No person shall cause, suffer, or allow to be emitted into the atmosphere from any incinerator, or to pass a convenient measuring point near the stack outlet, flyash in gases to exceed 0.20 pounds per 1,000 pounds of gases.

b. Notwithstanding the provisions of Regulation 12-4-1, no person shall cause, suffer, or allow to be emitted into the atmosphere, from any incinerator, smoke which in appearance, density, opacity, or shade is as dark as, or darker than, No. 1 on the Ringelmann Chart (20% opacity).

c. For a device used by the lumber industry exclusively for the burning of wood wastes, the provisions of this regulation shall apply except during the building of a new fire not more than once each day for a period not to exceed 30 consecutive minutes.

REG. 12-5-4 AUTHORITY OF OTHER PUBLIC AGENCIES

Approval of the use of an incinerator by the control officer is not intended to exempt the incinerator, its location, or its operation from the requirements of any other public agency exercising proper jurisdiction.

SECTION 12-6 OPEN BURNING

REG. 12-6-1 UNLAWFUL OPEN BURNING

Notwithstanding the provisions of any other section of this chapter, it is unlawful for any person to ignite, cause to be ignited, or suffer, allow, or maintain any open outdoor fire except as provided in this section.

REG. 12-6-2 EXCEPTIONS REQUIRING NO PERMISSION

The following fires are excepted from the provisions of this section and require no authorization from a public officer or government agency:

(1) Fires used only for cooking or for providing warmth for human beings.

(2) Fires ignited for recreational purposes.

(3) Fires used for the branding of animals.

(4) Fires intended for frost protection in farming or nursery operations.

(5) Fires set for the disposal of dangerous materials where there is no safe alternative method of disposal.

REG. 12-6-3 EXCEPTIONS REQUIRING PERMISSION

The following fires are excepted from the provisions of this section when they are specifically authorized or permitted:

(1) Any fire set or permitted by any public officer in the performance of official duty, if such fire is set or permission is given for the purpose of weed control, fire prevention, or instruction in fire-fighting methods.

(2) Any fire set or permitted by the state entomologist or the county agricultural agent for the purpose of disease or pest control.

(3) Any fire set or permitted by the federal government or any of its departments, agencies, or agent or by the state or any or its agencies, departments, or political subdivisions, if such fire is set or permission is given for the purpose of watershed rehabilitation or control through vegetative manipulation.

Permission for the setting of any of the fires described above shall be given in writing, and copies of each such written permit shall be transmitted immediately to the director of the state division of air-pollution control and to the control officer of Coconino County. Any such fire shall be conducted in a manner and at such time as approved by the control officer or the director of the division of air-pollution control unless doing so would defeat the purpose of the permission.

REG. 12-6-4 EXCEPTIONS UNDER SPECIAL CIRCUMSTANCES

Open burning shall be excepted from the provisions of this section in the case of a fire permitted by any rule or regulation issued pursuant to Arizona Revised Statutes, Chapter 6, Article 8, in the case of a fire given a conditional permit by the hearing board, or in the case of a fire permitted by any rule, regulation, or conditional permit issued pursuant to Title 36, Chapter 14, Article 1, Arizona Revised Statutes, when the state division of air-pollution control, pursuant to Section 36-1706, Arizona Revised Statutes, has assumed jurisdiction in Coconino County.

SECTION 12-7 VIOLATIONS

REG. 12-7-1 MISDEMEANOR: PENALTY

Any person who violates any provision of these air-pollution-control regulations or any effective order of abatement issued pursuant to them is guilty of a misdemeanor, punishable by a fine of not less than fifty dollars or more than three hundred dollars per day for each day the violation continues.

Each day of violation shall constitute a separate offense.

REG. 12-7-2 ORDER OF ABATEMENT

When the control officer has reasonable cause to believe that any person is violating any provision of these air-pollution-control regulations or any requirement of an operating or conditional permit issued pursuant to them, he may forthwith serve upon such person by registered or certified mail, or in person, an order of abatement, or may file a complaint alleging violation, pursuant to ARS 36-789.01, or both.

The order of abatement shall state with particularity the act being done that constitutes the violation, shall state in its entirety the certain requirement, provision, rule, or regulation being violated, and shall inform the alleged violator that he is entitled to a hearing if he requests such hearing in writing within twenty days after the date of issuance of the order.

An order of abatement may be conditional and require a person to refrain from the particular act unless certain conditions are met.

REG. 12-7-3 HEARINGS ON ORDERS OF ABATEMENT

a. An order of abatement issued by the control officer shall become effective immediately upon the expiration of the time during which a request for a hearing may be made, unless the person or persons named in such order shall have made a timely request for a hearing before the hearing board.

b. If a hearing is requested, the hearing board shall hold the hearing within thirty days from receipt of the request, unless such time is extended by the hearing board. Written notice of the time and place of the hearing shall be sent by the hearing board to the person or persons requesting the hearing and to the control officer at least fifteen days before the hearing.

c. If the board, after the hearing, determines that the act or acts set forth in the order constitute a violation of any provision of these regulations or any requirement of an operating or conditional permit issued pursuant to these regulations and that no conditional permit is justified, the board shall affirm or modify the order of abatement.

REG. 12-7-5 NOTICE OF HEARING; PUBLICATION; SERVICE

a. Any notice of hearing required by these regulations shall be given by publication of a notice of hearing at least two times in a newspaper of general circulation and by posting copies of the petition and notice in at least three conspicuous places in the county.

b. The person allegedly committing or having committed the violation or requesting the conditional permit shall be served personally or by registered or certified mail at least fifteen days prior to the hearing with a written notice of hearing.

REG. 12-7-6 INJUNCTIVE RELIEF

Upon the failure or refusal of a person to comply with an order of abatement, in cases where an order of abatement has become effective, the county may file an action in the Superior Court of Coconino County to restrain and enjoin the person from engaging in further acts violating the order of abatement. The court shall proceed as in other actions for injunctions. In the preliminary hearing in an action for an injunction or restraining order brought pursuant to Title 36, Chapter 6, Article 8, Arizona Revised Statutes, any finding of the hearing board shall be prima facie evidence of the fact or facts found therein until rebutted.

MARICOPA COUNTY HEALTH CODE
CHAPTER XII
AIR POLLUTION CONTROL RULES AND REGULATIONS

REGULATION I GENERAL PROVISIONS

Rule 1. EMISSIONS REGULATED: POLICY; LEGAL AUTHORITY

A. The intent of these Rules and Regulations is to prevent, reduce, control, correct or remove air pollution originating within the territorial limits of Maricopa County and to carry out the mandates of the State Air Pollution Control Law.

B. These Rules and Regulations are adopted pursuant to the authority granted by Section 36-779, Arizona Revised Statutes.

Rule 2. DEFINITIONS

In these Rules and Regulations, unless the context otherwise requires:

✓ adequate

A. Air Pollution means the presence in the outdoor atmosphere of one or more air contaminants or combinations thereof in sufficient quantities, which either alone or in connection with other substances, by reason of their concentration and duration are or tend to be injurious to human, plant or animal life, or causes damage to property, or unreasonably interferes with the comfortable enjoyment of life or property, of a substantial part of a community, or obscures visibility, or which in any way degrades the quality of the ambient air below the standards established by the Board of Supervisors.

B. Accepted means approved by the Control Officer.

C. Advisory Council means the Maricopa County Air Pollution Control Advisory Council appointed by the Maricopa County Board of Supervisors.

D. Air Contaminants include smoke, vapors, charred paper, dust, soot, grime, carbon, fumes, gases, sulfuric acid mist aerosols, aerosol droplets, odors, particulate matter, windborne matter, radioactive materials, noxious chemicals, or any other material in the outdoor atmosphere.

E. Approved means approved in writing by the Maricopa County Air Pollution Control Officer.

F. ASME means the American Society of Mechanical Engineers.

G. ASTM means the American Society for Testing Materials.

H. Control Officer means the Director of the Maricopa County Department of Health Services or his authorized representative.

I. Department means the Maricopa County Department of Health Services.

J. Device, Machine, Equipment or other article means any assembly or mechanism, the operation of which may cause or contribute to air pollution or which is used primarily to prevent or control the emission of air pollutants.

K. Discharge means the release, escape or emission of an air contaminant into the atmosphere.

L. Dust means any solid particulate matter discharge, released into or carried in the atmosphere by natural forces or by any fuel burning, combustion, process equipment, device, construction work or by manual, mechanical or industrial processes including, but not restricted to, crushing, bagging, covering, conveying, transporting, transferring, and the like.

M. Flue means a duct or passage, such as a stack or chimney for air contaminants.

N. Fly Ash means particulate matter, gasborne or airborne, consisting essentially of fused ash, and/or unburned, or partially burned, material resulting from combustion of fuel or refuse.

O. Fumes mean gases and vapors which cause air pollution when released into ambient air.

P. Gasoline means any petroleum distillate in liquid form at atmospheric pressure having a Reid vapor pressure four pounds or over.

Q. Hearing Board means the Maricopa County Air Pollution Control Hearing Board appointed by the Maricopa County Board of Supervisors.

R. Incinerator means any equipment, machine, device, contrivance or other articles and all appurtenances thereof used for the destruction or reduction by burning of refuse, salvage material or any other combustible waste matter.

S. Motor Vehicle means a self-propelled vehicle for use on the public roads and highways of the State of Arizona, and required to be registered under the Arizona State Uniform Motor Vehicle Act.

T. Odors means smells, aromas, or stenches commonly recognized as offensive, obnoxious or objectionable to a substantial part of a community.

underline

U. Opacity means a condition of the atmosphere, or any part thereof, in which it is partially or wholly impervious to rays of light, and as used in these Rules and Regulations refers to a condition of the atmosphere which obscures an observer's view.

V. Open outdoor fire means any combustion of material of any type outdoors, where the products of combustion are not directed through a flue.

W. Operation means any physical action resulting in a change in the location, form or physical properties of a material, or any chemical action resulting in a change in the chemical composition or properties of a material.

X. Organic Solvent means any liquid composed wholly or in part of a carbon compound which is capable of dissolving another substance or carrying it in suspension.

Y. Particulate Matter means any discrete particles of material, other than uncombined water, which are carried in, suspended in, or discharged into the atmosphere as a liquid or solid.

Z. Permit Unit means a machine, device or other article, including but not limited to, fuel burning equipment, refuse burning equipment, storage tank and/or process equipment which functions for the processing or storage of material or materials, or a group of such equipment interconnected by conveyor, chute, duct, pipe or hose for the movement of process material or products thereof. A permit unit or grouping may be considered as encompassing all the equipment used from the point or points of initial feed to the point or points of termination where the process flow of material will be or can be interrupted or to the point or points of discharge where such discharge will be stored, go into a different permit group, be physically separated from the equipment of the permit unit group, or be discharged into the atmosphere.

aa. Person means any public or private corporation, company, partnership, association or society of persons, the Federal Government and any of its departments or agencies, the State and any of its agencies, departments or political subdivisions, as well as a natural person.

bb. Process and Process Equipment means any activity, operation or treatment involving the use of any machine, equipment, device or other article for changing any materials or for storage or holding of any materials and all appurtenances thereto including, but not limited to, heat-treating furnaces, cupolas, electric furnaces, ferrous and nonferrous foundries, hot mix asphalt plants, cement asphalt plants, concrete mix plants, sand and gravel operations, cotton gins, feed mills, chemical plants, cement plants, gypsum plants, refineries, dry cleaners, mining and smelting including equipment used in connection therewith, and all other methods or forms of manufacturing, processing or storage that may cause or contribute to air pollution in Maricopa County, and all devices used for the control or reduction of air contaminants arising from such processes and process equipment.

cc. Process Weight means the total weight of all materials introduced into any specific process, which materials may in any form be discharged into the atmosphere. Solid fuels which are part of the charge will be considered part of the process weight.

dd. Process Weight per hour means the total process weight for a representative period of operation or for a continuous portion thereof, divided by the number of hours of each period or portion thereof.

ee. Ringelmann Smoke Chart means the Ringelmann Chart with instructions for use as published by the U.S. Bureau of Mines in I.C. 8333.

ff. Smoke means small visible gasborne particles, other than water which are discharged into the atmosphere.

gg. Source means and refers to any physical facility, device, contrivance, condition, or activity, from which air contaminants are or may be emitted.

hh. Standard Conditions means a gas temperature of 60 degrees Fahrenheit and a gas pressure of 14.7 pounds per square inch absolute. When applicable, all analyses and tests shall be calculated and reported at standard gas temperatures and pressure values.

ii. Special Inspection Warrant means an order in writing issued in the name of the State of Arizona, signed by a Magistrate, directed to the Control Officer or his deputies authorizing him to enter into or upon public or private property for the purpose of making an inspection authorized by law.

jj. Submerged Fill Pipe means a fill pipe, the discharge opening of which is entirely submerged when the liquid is six (6) inches above the bottom of the tank. Submerged fill pipe, when applied to a tank which is loaded at its side means a fill pipe, the discharge opening of which is entirely submerged when the liquid level is eighteen (18) inches above the bottom of the tank.

kk. Vapor means the gaseous form of a substance normally found in the liquid or solid state.

Rule 3. AIR POLLUTION PROHIBITED

No person shall discharge from any source whatsoever into the open air, air contaminants which exceed in quantity or concentration that specified and allowed in these Rules and Regulations or the Rules and Regulations of the Arizona State Department of Health or the Arizona Revised Statutes or which cause damage to property or unreasonably interfere with the comfortable enjoyment of life or property of a substantial part of a community, or obscure visibility, or which in any way degrade the quality of the ambient air below the standards established by the Board of Supervisors or the State Board of Health.

REGULATION II PERMITS

start a new page

Rule 20. PERMITS REQUIRED

A. Any person erecting, installing, replacing or making a major alteration to any machine, equipment, incinerator, device or other article which may cause or contribute to air pollution or the use of which may eliminate or reduce or control the emission of air pollutants, shall first obtain an Installation Permit from the Control Officer. An Installation Permit shall remain in effect until the operating permit for such equipment is granted or denied or the application is cancelled but in no instance more than two years.

B. Before any machine, equipment, incinerator, device or other article described in paragraph A of this Rule, in existence or in operation at the time of, or subsequent to, the effective date of these Rules and Regulations may be operated or used, an operating permit shall be obtained in writing from the Control Officer.

C. No person shall use any power equipment for commercial purposes to clear away, excavate, or level land or engage in any earth moving activities without first obtaining a permit from the Control Officer. A fee of $1.00 per acre will be charged for each individual site with a minimum fee of $5.00. The permittee shall grant the Control Officer the right of inspection of such land and shall employ such dust control measures as the Control Officer deems necessary for the control of air pollution. This Regulation is not intended to include normal farm cultural practices.

D. A permit is required for any open burning authorized under the exceptions in Section 36-789 Arizona Revised Statutes or Rule 51 of these Rules and Regulations.

Rule 21. PERMIT CONDITIONS

A. Every application for an Installation Permit or an Operating Permit shall be filed in the manner and form prescribed by the Control Officer, and shall contain all the information necessary to enable the Control Officer to make the determination to grant or deny such application. Each application for Installation Permit shall be accompanied by appropriate plans and specifications.

B. Operating permits shall be renewed annually, subject to compliance with these Rules and Regulations, upon payment of an annual renewal fee.

C. A separate fee shall be charged for each permit unit of basic equipment and for each permit unit of air pollution control equipment.

D. Where an operating permit is granted for equipment erected, installed, or replaced, on the site location of an existing operating permit of the same permittee, the annual renewal date of the new permit shall be the anniversary date of the existing permit and the new operating permit fee shall be pro-rated from the date of issuance to that anniversary date.

E. In granting a permit, the Control Officer may require compliance with specific conditions and terms which he deems applicable. Failure to comply shall invalidate the permit.

F. No permit is valid until the applicable permit fee has been received and the permit issued by the department.

Rule 22. PERMIT DENIAL-ACTION-TRANSFER-POSTING-REVOCATION-COMPLIANCE-EXPIRATION

A. The Control Officer shall deny an Installation Permit or an Operating Permit if the applicant does not show that every such machine, equipment, incinerator, device or other article, the use of which may cause or contribute to air pollution, or the use of which may eliminate or reduce or control the emission of air pollutants, is so designed, controlled, or equipped with such air pollution control equipment, that it may be expected to operate without emitting or without causing to be emitted air contaminants in violation of the provisions of these Rules and Regulations, or those of the State Board of Health.
(Arizona Revised Statute 36-779.02)

B. Prior to acting on an application for an Operating Permit, the Control Officer pursuant to Rule 42 of these Regulations may require the applicant to provide and maintain such facilities as are necessary for sampling and testing purposes in order to secure information that will disclose the nature, extent, quantity or degree of air contaminants discharged into the atmosphere from the machine, equipment, incinerator, device or other article described in the Installation Permit.

C. In acting upon an application for an Operating Permit, if the Control Officer finds that such machine, equipment, incinerator, device, or other article described in these Rules and Regulations has been constructed not in accordance with the Installation Permit, he shall deny the application for such Operating Permit. The Control Officer shall not accept any further application for an Operating Permit for such machine, equipment, incinerator, device or other article so constructed until he finds that such machine, equipment, incinerator, device or other article has been reconstructed in accordance with the Installation Permit. (Arizona Revised Statute 36-779.02)

D. Non-Transferable - An Installation Permit or an Operating Permit shall not be transferable, whether by operation of law or otherwise, either from one piece of equipment to another, or from one person to another. (Arizona Revised Statute 36-779.04)

E. Expiration - An Installation Permit shall expire two (2) years from the date of its issuance if no action has been initiated on such permit.

F. Posting of Permit - A person who has been granted an Operating Permit, shall firmly affix such permit, an approved facsimile of such permit, or other approved identification bearing the permit number upon such machine, equipment, incinerator, device or other article for which the Operating Permit is issued in such a manner as to be clearly visible and accessible. In the event that such machine, equipment, incinerator, device or other article is so constructed or operated that such permit cannot be so placed, the permit shall be mounted so as to be clearly visible in an accessible place within a reasonable distance of such machine, equipment, incinerator, device or other article, or maintained readily available at all times on the operating premises. (Arizona Revised Statute 36-779.06)

G. Permit Revocation

1. The Control Officer may revoke a permit if he determines, by competent evidence, that the nature, extent, quantity, or degree of air contaminants discharged into the atmosphere from any equipment covered by the permit is in violation of these Rules and Regulations, or the Rules and Regulations of the State Department of Health.

2. The Control Officer shall notify the permittee of such revocation in writing, giving the reasons therefor, and the revocation shall become final ten (10) days after notification. Notification may be made in person or by Registered or Certified mail.

3. Revocation of a permit may be canceled by the Control Officer anytime before the revocation becomes final if the permittee has corrected the condition responsible for the permit revocation.

4. Revocation of a permit shall be stayed by the permittee's written petition for a hearing, filed in accordance with Regulation VI, Rule 62 of these Regulations.

5. Upon revocation becoming final, an Operating Permit shall be issued only on the basis of an application for a new permit.

H. Compliance with other laws and regulations - The issuance of any permit by the Control Officer shall not relieve any person from compliance with these Rules and Regulations or any other law or ordinance.

Rule 23. PERMIT CLASSES

Whereas Section 36-779.01 Arizona Revised Statutes states that any person erecting, installing, replacing or making a major alteration to any machine, equipment, incinerator, device or other article which may cause or contribute to air pollution or the use of which may eliminate or reduce or control the emission of air pollutants, shall first obtain an Installation Permit from the Control Officer and that before any such machine, equipment, incinerator, device, or other article may be operated or used, an Operating Permit shall be obtained in writing from the Control Officer, it is hereby established that the following classes of machines, equipment, devices or other articles may cause or contribute to air pollution or may be used to prevent or control air contaminants and therefore require a permit from the County Air Pollution Officer.

A. Fuel Burning Equipment - This class includes any equipment, machine, device, contrivance or other article used primarily to burn any fuel for the purpose of heating or heat exchange, and all appurtenances thereto including air pollution control equipment. This class does not include refuse burning equipment and equipment specifically excepted by the Arizona Revised Statutes.

B. Refuse Burning Equipment - This class includes any equipment, machine, device, contrivance or other article used for the destruction or reduction of refuse, salvage material and all other waste matter by burning and all appurtenances thereto including all equipment or devices used for the prevention or control of air contaminants.

C. Process Equipment - This class includes any equipment, machine, device, contrivance or other article used for changing any material whatever or for the storage or holding or processing of any materials and all appurtenances thereto, the use or existence of which may cause or contribute to the discharge or air contaminants into the outdoor atmosphere or are used for the prevention or control of air contaminants. This class does not include that equipment specifically classified as fuel burning or refuse burning equipment in these Rules and Regulations.

D. Petroleum Storage - This class includes any tank reservoir, or other container with the capacity of 250 gallons or more used for the storage of petroleum products, (Liquid or gas) except those products with vapor pressure below 2.0 psia but does not include vehicles delivering these products.

E. Miscellaneous - This class includes any machine, device, equipment or other article or process or activity which is not included in the preceding schedules and which requires a permit under the authority of these Rules and Regulations or the Arizona Revised Statutes.

Rule 24. INSTALLATION PERMIT FEES

A. A ten dollar ($10.00) fee shall be charged for the issuance of an Installation Permit.

Rule 25. ANNUAL OPERATING PERMIT FEES

A. One annual operating fee shall be charged from the date of issuance of a permit to use or operate any machine, equipment, device or other article for which a permit is required by these Rules and Regulations. The total of all annual operating permit fees at one location shall not exceed $750.00. The permit fee shall be due and paid on or before each anniversary date as prescribed in the following schedule. In the event that a stationary operation requiring an annual permit is operated less than six months in any annual operating permit period, the permit fee shall be one half of the annual operating fee.

SCHEDULE FOR PERMIT FEES

Schedule 1

Fuel Burning Equipment Schedule (except equipment covered by Schedule 2)

Based on designed fuel consumption,
using gross Input heating values
per permit unit

BTU per Hour	Annual Operating Permit Fee
500,000 or greater but less than 1,500,000 --------	$ 25.00
1,500,000 or greater but less than 5,000,000 --------	35.00
5,000,000 or greater but less than 15,000,000 -------	75.00
15,000,000 or greater but less than 50,000,000 -------	100.00
50,000,000 or greater -------------------------------	135.00

Schedule 2

Fuel Burning Equipment using Natural Gas or Liquid Petroleum Gas

Based on designed fuel consumption,
using gross Input heating values
per permit unit

BTU per Hour	Annual Operating Permit Fee
500,000 or greater but less than 1,000,000 --------	$ 10.00
1,000,000 or greater but less than 5,000,000 --------	20.00
5,000,000 or greater -------------------------------	50.00

Schedule 3

Refuse Burning Equipment

Based on the maximum horizontal inside cross sectional area of the primary combustion chamber (in square feet)

Area in Square Feet	Annual Operating Permit Fee
Up to and including 4	$ 10.00
Greater than 4 but less than 9	20.00
9 or greater but less than 27	50.00
27 or greater	75.00

Schedule 4

Tanks, Reservoirs or other containers as defined in Rule 23, Paragraph D

Based on capacities in gallons or cubic equivalent per unit

Gallons	Annual Operating Permit Fee
250 or greater but less than 15,000	$ 10.00
15,000 or greater but less than 40,000	20.00
40,000 or greater but less than 400,000	35.00
400,000 or greater but less than 4,000,000	50.00
4,000,000 or greater	75.00

Schedule 5

Motors - Engines

Based on total rated horsepower or the equivalent of all motors and engines including but not limited to gasoline, diesel, natural gas, liquid petroleum gas and electricity * including a permit unit other than those used in mobile equipment.

Horsepower	Annual Operating Permit Fee
Up to and including 5	$ 7.00
Greater than 5 but less than 15	12.00
15 or greater but less than 30	25.00
30 or greater but less than 45	35.00
45 or greater but less than 65	50.00
65 or greater but less than 125	75.00
125 or greater but less than 200	100.00
200 or greater	135.00

*Only electric motors used to drive or power any machine, equipment or device or other article that may cause or contribute to air pollution or may be used to prevent or control air contaminants.

Schedule 6

Electric Energy Equipment (except Electric Motors)

Based on total Kilovolt Ampere (KVA)
Ratings per permit unit

Kilovolt Amperes (KVA)	Annual Operating Permit Fee
Up to and including 45	$ 7.00
Greater than 45 but less than 145	12.00
145 or greater but less than 450	25.00
450 or greater but less than 1,450	35.00
1,450 or greater but less than 2,500	50.00
2,500 or greater but less than 4,500	75.00

Schedule 6 (Cont'd.)

Kilovolt Amperes (KVA)	Annual Operating Permit Fee
4,500 or greater but less than 14,500	$ 100.00
14,500 or greater	135.00

Schedule 7

Miscellaneous

Any machine, device, equipment or other article or process or activity which is not included in the preceding schedules and which requires a permit under these Rules and Regulations shall be assessed an annual Operating Permit Fee of $20.00 for each permit unit.

Rule 26. PORTABLE EQUIPMENT

A. In the case of a permit issued to operate portable equipment including, but not limited to sandblasting equipment, rock crushers, screens and conveyors at more than one location in the County requiring erection or assembly at the site, the permittee shall notify the Control Officer in writing prior to each change of location of the equipment. The permit shall become invalid for failure to notify the Control Officer.

REGULATION III CONTROL OF AIR CONTAMINANTS

Rule 30. VISIBLE EMISSIONS

No person shall discharge into the atmosphere from any source whatsoever, except incinerators, any air contaminant for a period or periods aggregating more than three (3) minutes in any one (1) hour which is:

A. As dark as or darker in shade than that designated as No. 2 on the Ringelmann Chart as published by the U.S. Bureau of Mines.

B. Of such an opacity as to obscure an observer's view to a degree equal to or greater than do air contaminants described in paragraph A of the Rule.

Rule 31. EMISSIONS OF PARTICULATE MATTER

A. No building or its appurtenances, a utility or open area may be used, constructed, repaired, altered, or demolished without taking all reasonable precautions to prevent particulate matter from becoming windborne or airborne. Dust and other types of particulates shall be kept to a minimum by such measures as wetting down, covering, landscaping, paving, treating or by other effective means.

B. No person shall repair, construct, or reconstruct any road or alley, or having authority to prevent it, permit the use of or use such road, alley or open area without taking all resonable precautions to prevent particulate matter from becoming windborne or airborne. Dust and other particulates shall be kept to a minimum by employing temporary paving, dust palliatives, wetting down, detouring or by other effective means.

C. No person shall handle, transport or store any material without using all reasonable means to prevent particulate matter from becoming airborne.

D. No person shall conduct sandblasting or other abrading operations without minimizing particulate emissions by good modern practices, including but not limited to wet blasting, the use of effective enclosures with necessary dust collecting equipment, or other equally effective means.

E. Process Industries

1. No person owning or operating any process source shall discharge or cause or permit the discharge of particulate matter into the atmosphere in excess of the hourly rate shown in Table 1 for the process weight rate identified for each source.

TABLE 1

Process Weight Rate (pounds per hour)	Emission Rate (pounds per hour)
50	0.36
100	0.55
500	1.53
1,000	2.25
5,000	6.34
10,000	9.73
20,000	14.99
60,000	29.60
80,000	31.19
120,000	33.28
160,000	34.85
200,000	36.11
400,000	40.35
1,000,000	46.72

Interpolation of the data in the table for process weight rates up to 60,000 lbs/hr shall be accomplished by use of the equation: $E = 3.59\ P^{0.62}$ $P \leq 30$ tons/hr and interpolation and extrapolation of the data for process weight rates in excess of 60,000 lbs/hr shall be accomplished by use of the equation:

$$E = 17.31\ P^{0.15} \qquad P > 30 \text{ tons/hr}$$

where:

E = Emissions in pounds per hour

P = Process weight in tons per hour

2. Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpretation of this regulation, Rule 31(E), the interpretation that results in the minimum value for allowable emission shall apply.

3. For purposes of this regulation, Rule 31(E), the total process weight from all similar process units at a plant or premises shall be used for determining the maximum allowable emission of particulate matter.

4. Rule 31(E)-1 of this regulation shall not apply to incinerators, fuel-burning installations, or Portland cement plants having a process weight rate in excess of 250,000 lbs/hr.

5. No person operating or owning a Portland cement plant with a process weight rate in excess of 250,000 lbs/hr shall discharge or cause or permit the discharge of particulate matter into the atmosphere from any kiln which is in excess

of 0.30 lb per tons of feed to the kiln (.015 Kg. per metric tons), maximum 2-hour average, or greater than 10 percent opacity, except that where the presence of uncombined water is the only reason for failure to meet the requirements of this paragraph, such failure shall not be a violation of this section.

6. No person owning or operating a Portland cement plant shall discharge or cause or permit the discharge into the atmosphere of particulate matter from the clinker cooler which is in excess of 0.10 lb per ton of feed to the kiln (0.050 Kg. per metric ton), maximum 2-hour average, or 10 percent opacity or greater.

7. No person owning or operating a Portland cement plant shall discharge or cause or permit the discharge into the atmosphere of particulate matter from any affected facility, other than the kiln or clinker cooler which is 10 percent opacity or greater.

8. The test measures and procedures used to determine compliance with this rule will be in accordance with the procedures specified by the EPA in the Federal Register, May 14, 1973, 38FR12704, Section 52.126. Equivalent methods and procedures may be used if approved by the Control Officer.

Rule 32. ODORS AND GASEOUS EMISSIONS

A. No person shall emit gaseous or odorous materials from equipment, operations or premises under his control in such quantities or concentrations as to cause air pollution.

B. No person shall operate or use any machine, equipment or other contrivance for the treatment or processing of animal or vegetable matter, separately or in combination, unless all gases, vapors, and gas-entrained effluents from such operation, equipment or contrivance have been:

1. Incinerated to destruction at a temperature of not less than 1,300 degrees Fahrenheit, or processed in a manner determined to be equally or more effective for the control of air pollution.

2. All persons owning or responsible for any process involving the reduction of animal and/or vegetable matter shall install, use, and maintain such devices as are necessary to prevent or control emissions of air contaminants.

C. Materials including, but not limited to, solvents or other volatile compounds, paints, acids, alkalies, pesticides, fertilizer and manure shall be processed, stored, used and transported in such a manner and by such means that they will not unreasonably evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution; and where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or discharge, the installation and use of such control methods, devices or equipment shall be mandatory.

D. Where a stack, vent, or other outlet is at such a level that fumes, gas, mist, odor, smoke, vapor or any combination thereof constituting air pollution are discharged to adjoining property, the Air Pollution Control Officer may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet by the owner or operator thereof to a degree that will adequately dilute, reduce or eliminate the discharge of air pollution to adjoining property.

E. No person shall emit hydrogen sulfide from any location in such manner and amount that the concentration of such emissions into the ambient air at any occupied place beyond the premises on which the source is located exceeds 0.03 parts per million by volume for any averaging period of 30 minutes or more.

F. No person shall emit into the ambient air any sulfur oxide or sulfuric acid in such manner and amounts as to result in ground level concentrations at any place beyond the premises on which the source is located exceeding those limits shown in the following table:

F. (Continued)

Concentration of Sulfur Dioxide	Averaging Time
850 ug/m^3	1 hour
250 ug/m^3	24 hours
120 ug/m^3	72 hours

Concentration of Sulfuric Acid and Sulfur Trioxide expressed as Sulfur Acid	Averaging Time
15 ug SO_4/m^3	24 hours

G. No person shall operate an asphalt kettle unless he controls air contaminant emissions by good modern practices including but not limited to: (1) maintenance of temperature below both the asphalt flash point and the maximum temperature recommended by the asphalt manufacturer through the use of automatic temperature controls, (2) operation of the kettle with the lid closed except when charging, (3) pumping the asphalt from the kettle, (4) drawing the asphalt through cocks without dipping, (5) firing of the kettle with a clean burning fuel and (6) maintaining the kettle in clean, properly adjusted and good operating condition.

Rule 33. STORAGE AND HANDLING OF PETROLEUM PRODUCTS

A. No person shall place, store or hold in any reservoir, tank or other container having a capacity of sixty-five thousand (65,000) or more gallons any gasoline, or petroleum or petroleum distillate having a vapor pressure of 2.0 pounds per square inch, absolute, or greater under actual storage conditions, unless such tank, reservoir or other container is a pressure tank maintaining working pressure sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere or is equipped with one of the following vapor-loss control devices, properly installed, in operation and in good working order:

1. A floating roof consisting of a pontoon type or double deck type roof, resting on the surface of the liquid contents and equipped with a closure seal, to close the space between the roof eave and tank well, designed in accordance with accepted standards of the petroleum industry. The control equipment shall not be used if the gasoline, petroleum, or petroleum distillate has a vapor pressure of twelve (12) pounds per square inch absolute or greater under actual conditions. All tank gauging and sampling devices shall be gas tight except when gauging or sampling is taking place;

2. Other equipment proven to be of equal efficiency for preventing discharge of hydrocarbon gases and vapors to the atmosphere.

B. Any other petroleum storage tank which is constructed or extensively remodeled shall be equipped with a submerged filling device or other equally effective device to control the emissions of hydrocarbons.

C. All facilities for dock loading of petroleum, or petroleum products having a vapor pressure of 2.0 pounds per square inch absolute or greater at loading pressure shall provide for submerged filling or other equally effective device to control the emission of hydrocarbons.

D. No person shall install or use a petroleum, or petroleum distillate storage tank with a capacity of 250 gallons or more, used for the purpose of storage of petroleum products with a vapor pressure of 2.0 psia or more, unless such tank is equipped with a submerged fill pipe or is a pressure tank as described in paragraph A of this section of the Regulation or is fitted with a vapor recovery system as described in sub-paragraph 1 of this section of the Rules and Regulations.

E. All existing petroleum, or petroleum distillate storage tanks with a capacity of 250 gallons or more used for the purpose of storage of petroleum products with a vapor pressure of 2.0 psia or more, shall be equipped with a submerged filling device or other equally effective device. No person shall load or permit the loading of such petroleum, or petroleum distillate, into any storage tank with a capacity of 250 or more gallons that is not equipped with a permanent submerged fill pipe or other equally effective device.

F. When loading petroleum or petroleum distillate of more than 2.0 psia into a storage tank as described in paragraph E from tank truck or trailer, the hose connection to the storage tank fill pipe shall be a tight, leakproof fill connection.

Rule 34. ORGANIC SOLVENTS

A. DEGREASERS

1. No person shall use or conduct any vapor-phase degreasing operation without minimizing organic solvent vapor diffusion emissions by good modern practices such as but not limited to the use of a free board chiller or other effective device operated and maintained in accordance with solvent and equipment manufacturers' specifications.

diffusion ✓

2. Spray degreasing shall be conducted in an enclosure equipped with controls which will minimize the emission of organic solvents.

B. DRY CLEANING

1. Chlorinated Synthetic Solvents

a. Effective one year from the date of adoption of these Rules and Regulations, no person shall conduct any dry cleaning operation using chlorinated synthetic solvents without minimizing organic solvent emissions by good modern practices including but not limited to the use of an adequately sized and properly maintained activated carbon absorber or other equally effective control device.

b. All new dry cleaning establishments using chlorinated synthetic solvents, constructed, installed or used after the effective date of these Rules and Regulations shall minimize organic solvent emissions by good modern practices including but not limited to the use of an adequately sized and properly maintained activated carbon absorber or other equally effective control device.

2. Petroleum Solvents

a. Effective three (3) years from the date of adoption of this Rule, no person shall operate any dry cleaning establishment using petroleum solvents without the use of a direct-fired afterburner adequately sized, operated and maintained so as to reduce solvent emissions by at least 90 percent, or other equally effective control system.

b. All new dry cleaning establishments, using petroleum solvents, constructed, installed or used after the effective date of this Rule shall be equipped with a direct-fired afterburner adequately sized, operated and maintained so as to reduce solvent emissions by at least 90 percent, or other equally effective control system.

C. SPRAY PAINT AND OTHER SURFACE COATING OPERATIONS

1. No person shall conduct any spray paint operation without minimizing organic solvent emissions by good modern practices. Such operations other than arthitectural coating shall be conducted in an enclosed area equipped with controls containing no less than 96 percent of the overspray.

2. Effective one year from the date of adoption of these Rules and Regulations, no person shall employ, apply, evaporate or dry any architectural coating for industrial or commercial purposes, material containing photochemically reactive solvent or shall thin or dilute any architectural coating with a photochemically reactive solvent as defined in paragraph H of this Rule.

3. For the purposes of this Rule, architectural coating is defined as a coating used commercially or industrially for residential, commercial, or industrial buildings and their appurtenances, structural steel and other fabrications such as but not limited to, storage tanks, bridges, beams and girders.

D. Effective one year from the date of adoption of these Rules and Regulations, except as provided in paragraph B, Subsection 2, no person shall discharge more than 15 pounds of organic materials into the atmosphere in any one day from any machine, equipment, incinerator, device, or other article in which any organic solvent or any material containing organic solvent comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen.

E. Effective one year from the date of adoption of these Rules and Regulations, no person shall discharge more than 40 pounds of organic material into the atmosphere in any one day from any machine, equipment, incinerator, device or other article used under conditions other than described in paragraph D of this Rule for employing, applying, evaporating or drying any photochemically reactive solvent as defined in paragraph H of this Rule.

F. Emissions of organic materials into the atmosphere required to be controlled by paragraphs D and E of this Rule shall be reduced by:

1. Incineration, provided that 90 percent or more of the carbon in the organic material being incinerated is oxidized to carbon dioxide, or

✓ adsorption

2. Adsorption or,

3. Processing in a manner not less effective than 1 and 2 above.

G. The provisions of this Rule shall not apply to:

1. The manufacturer of organic solvents, or the transport or storage of organic solvents or materials containing organic solvents.

2. The use of equipment for which other requirements are specified by Rule 33.

3. The spraying or other employment of insecticides, pesticides or herbicides.

H. For the purposes of this Rule, a photochemically reactive solvent is a solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified below or which exceeds any of the following individual percentage composition limitations, referred to the total volume of solvent:

1. A combination of hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones having an olefinic or cyclo-olefinic type of unsaturation: 5 percent;

2. A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: 8 percent;

3. A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent.

Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the above groups of organic compounds, it shall be considered as a member of the most reactive chemical group, that is, that group having the least allowable percent of the total volume of solvents.

I. Effective one year from the date of adoption of these Rules and Regulations, no person shall, during any one day, dispose of a total of more than one and one half gallons of any photochemically reactive solvent as defined in Paragraph H of this Rule or of any material containing more than one and one half gallons of any such photochemically reactive solvent by any means which will permit the evaporation of such solvent into the atmosphere.

Rule 35. INCINERATORS

A. No person shall burn any combustible material in any incinerator within Maricopa County except in a multiple-chamber incinerator, equipped with auxiliary fuel, or in equipment equally effective. No burning shall be conducted between sunset and the following sunrise.

B. For the purposes of these Rules and Regulations a "multiple-chamber incinerator" is any article, machine, equipment, contrivance, structure or part of a structure, used to dispose of combustible refuse by burning, consisting of three or more refractory lined combustion chambers in series, physically separated by refractory walls, interconnected by gas passage parts or ducts designed for maximum combustion of the material to be burned.

C. No incinerator shall be constructed, remodeled, installed or used until the following information, and such additional information and data as the Control Officer may require, have been filed with and approved by the Control Officer, and then only in compliance with the requirements of these Rules and Regulations.

1. Plans and specifications showing capacity, amount and type of waste to be incinerated, proposed fuel, fire chamber details, stack detail and location with reference to adjacent premises, auxiliary fuel controls;

2. Loading and unloading procedures and equipment;

3. Methods and equipment for preventing the discharge of contaminants into the ambient air;

4. Receptacles for storage and means for disposal of residue.

D. No person shall burn combustible wastes in any incinerator until it has passed a performance test based on the emission standards of Regulation F and G of this Rule, nor at any time in excess of these standards.

E. Approval of the use of an incinerator by the Control Officer is not intended to exempt the incinerator, its location or operation from the requirements of any public agency exercising proper jurisdiction.

F. No person shall emit into the outdoor atmosphere from any incinerator particulate matter to exceed 0.1 grains per cubic foot of flue gas at standard conditions ajdusted to 12 percent carbon dioxide in the exhaust gases and calculated as if not auxiliary fuel had been used.

G. Notwithstanding the provisions of Regulation III, Rule 30, no person shall emit into the atmosphere from any incinerator for an aggregate of more than thirty (30) seconds in any sixty (60) minutes, smoke the appearance, density, opacity or shade of which is as dark as No. 1 on the Ringelmann Scale.

REGULATION IV PRODUCTION OF RECORDS; MONITORING; TESTING AND SAMPLING FACILITIES

Rule 40. PRODUCTION OF RECORDS

A. When the Control Officer has reasonable cause to believe that any person is violating any provision of these Rules and Regulations or any requirements of an Operating or Conditional Permit issued pursuant to these Rules and Regulations, he may request in writing that such person forthwith produce all existing books, records and other documents evidencing tests, inspections or studies which may reasonably relate to compliance or non-compliance with these Rules and Regulations, and the addressee shall comply without unreasonable delay. (Arizona Revised Statute 36-780)

Rule 41. MONITORING

A. The owner, lessee or operator of a potential air contaminant source shall provide, install, maintain and operate such air contaminant monitoring devices as are reasonable and required to determine compliance in a manner acceptable to the Control Officer, and shall supply monitoring information as directed in writing by the Control Officer. Such devices shall be available for inspection by the Control Officer during all reasonable times. (Arizona Revised Statute 36-780)

B. Continuously Monitoring and Recording Emissions (added)

1.0 For the purpose of this rule, the following definitions shall apply:

mm. "Emission Standard" means a regulation (or portion thereof) setting forth an allowable rate of emissions, level of opacity, or prescribing equipment or fuel specifications that result in control of air pollution emissions.

nn. "Capacity Factor" means the ratio of the average load on a machine or equipment for the period of time considered to the capacity rating of the machine or equipment.

oo. "Excess Emissions" means emissions of an air pollutant in excess of an emission standard.

pp. "Nitric Acid Plant" means any facility producing nitric acid 30 to 70 percent in strength by either the pressure or atmospheric pressure process.

qq. "Sulfuric Acid Plant" means any facility producing sulfuric acid by the contact process by burning elemental sulfur, alkylation acid, hydrogen sulfide, or acid sludge, but does not include facilities where conversion to sulfuric acid is utilized primarily as a means of preventing emissions to the atmosphere of sulfur dioxide or other sulfur compounds.

rr. "Fossil fuel-fired steam generator" means a furnace or boiler used in the process of burning fossil fuel for the primary purpose of producing steam by heat transfer.

1.1 Every owner or operator of an emission source in a category listed in sub-paragraphs below shall:

(1) Install, calibrate, operate, and maintain all monitoring equipment necessary for continuously monitoring the pollutants specified in this rule for the applicable source category; and

(2) Complete the installation and performance tests of such equipment and begin monitoring and recording within eighteen (18) months of plant approval or promulgation. The source categories and the respective monitoring requirements are listed below:

1.1.1 Fossil-fuel-fired steam generators, as specified in sub-paragraph 2.1 shall be monitored for opacity emissions, nitrogen oxides emissions, sulfur dioxide emissions and oxygen or carbon dioxide.

1.1.2 Fluid Bed catalytic cracking unit catalyst regenerators, as specified in sub-paragraph 2.4 shall be monitored for opacity.

1.1.3 Sulfuric acid plants, as specified in sub-paragraph 2.3 shall be monitored for sulfur dioxide emissions.

1.1.4 Nitric acid plants, as specified in sub-paragraph 2.2 shall be monitored for nitrogen oxides emissions.

1.2 EXEMPTIONS

The provisions of this rule shall not apply to any source which is:

1.2.1 Subject to a new source performance standard promulgated in 40 CFR part 60.

1.2.2 Not subject to an applicable emission standard of the approved SIP; or

1.2.3 Scheduled for retirement within five (5) years after inclusion of monitoring requirements for the source in these rules and regulations, provided that adequate evidence and guarantees are provided that clearly show that the source will cease operations prior to such date.

1.3 Extensions

A reasonable extension of time may be provided for installations of monitors for facilities unable to meet the prescribed timeframe, provided the owner or operator of such facility demonstrates that good faith efforts have been made to obtain and install such devices within such prescribed timeframes.

1.4 Monitoring System Malfunction

A temporary exemption from the monitoring and reporting requirements of this rule may be provided during any period of monitoring system malfunction, provided that the source owner or operator shows to the satisfaction of the control officer that the malfunction was unavoidable and is being repaired as expeditionsly as practicable.

2.0 Minimum Monitoring Requirement - Sources listed in sub-paragraph 1.1 of this rule shall meet the following basic requirements:

2.1 Fossil Fuel-fired Steam Generators

Each fossil fuel-fired steam generator, except as provided in the following sub-paragraphs, with an annual average capacity factor greater than 30 percent, as reported to the Federal Power Commission for calendar year 1974, or as otherwise demonstrated to the Bureau by the owner of operator, shall conform with the following monitoring requirements when such facility is subject to an emission standard of an applicable plan for the pollutant in question.

2.1.1 A continuous monitoring system for the measurement of opacity which meets the performance specifications of subparagraph 3.1.1 of this rule shall be installed, calibrated, maintained, and operated in accordance with the procedures of this rule by the owner or operator of any such steam generator of greater than 250 million Btu per hour heat input except where:

2.1.1.1 Gaseous Fuel is the only fuel burned, or

2.1.1.2 Oil or a mixture of gas and oil are the only fuels burned and the source is able to comply with the applicable particulate matter and opacity regulations without utilization of particulate matter collection equipment, and where the source has never been found, through any administrative or judicial proceedings to be in violation of any visible emission standard of the applicable plan.

2.1.2 A continuous monitoring system for the measurement of sulfur dioxide which meets the performance specifications of subparagraph 3.1.3 of this rule shall be installed, calibrated, maintained, and operated on any fossil-fuel fired steam generator of greater than 250 million Btu per hour heat input which has installed sulfur dioxide pollutant control equipment.

2.1.3 A continuous monitoring system for the measurement of nitrogen oxides which meets the performance specification of subparagraph 3.1.2 of this rule shall be installed, calibrated, maintained, and operated on fossil fuel-fired steam generators of greater than 100 million Btu per hour heat input when such facility is located in an air quality control region where the control officer has specifically determined that a control strategy for nitrogen dioxide is necessary to attain the national standards, unless the source owner or operator demonstrates during source compliance tests as required by the bureau that such a source emits nitrogen oxides at levels 30 percent or more below the emission standard within the applicable plan.

2.1.4 A continuous monitoring system for the measurement of the percent oxygen or carbon dioxide which meets the performance specifications of subparagraphs 3.1.4 or 3.1.5 of this rule shall be installed, calibrated, operated, and maintained on fossil fuel-fired steam generators where measurements of oxygen or carbon dioxide in the flue gas are required to convert either sulfur dioxide or nitrogen oxides continuous emission monitoring data, or both, to units of the emission standard within the applicable plan.

2.2 Nitric Acid Plants

Each nitric acid plant of greater than 300 tons per day production capacity, the production capacity being expressed as 100 percent acid located in an air quality control region where the control officer has specifically determined that a control strategy for nitrogen dioxide is necessary to attain the national standard shall install, calibrate, maintain, and operate a continuous monitoring system for the measurement of nitrogen oxides which meets the performance specifications of sub-paragraph 3.1.2 of this rule for each nitric acid producing facility within such plant.

2.3 Sulfuric Acid Plants

Each sulfuric acid plant of greater than 300 tons per day production capacity, the production being expressed as 100 percent acid, shall install, calibrate, maintain and operate a continuous monitoring system for the measurement of sulfur dioxide which meets the performance specifications of 3.1.3 of this rule for each sulfuric acid producing facility within such plant.

2.4 Fluid bed catalytic cracking unit catalyst regenerators at petroleum refineries.

Each catalyst regenerator for fluid bed catalytic cracking units of greater than 20,000 barrels per day fresh feed capacity shall install, calibrate, maintain, and operate a continuous monitoring system for the measurement of opacity which meets the performance specifications of 3.1.1 of this rule.

3.0 Minimum Specifications

Owners or operators of monitoring equipment installed shall comply with this rule, except as provided in sub-paragraph 3.2 and,

3.1 Shall demonstrate compliance with the performance specifications set forth in Appendix B of Part 60, Chapter 1, Title 40, CFR as amended, incorporated herein by reference and contained in Appendix A of the Maricopa County Air Pollution Control Rules and Regulations. For the purposes of this rule, the word "administrator" as used in Appendix B of part 60, Chapter 1, Title 40, CFR shall mean the control officer of the Maricopa County Bureau of Air Pollution Control, and where reference is made to the "reference Method", the control officer may also allow the use of State and County approved reference methods or the federal approved reference methods.

3.111 Continuous monitoring systems for measuring opacity shall comply with performance specification 1.

3.1.2 Continuous monitoring systems for measuring nitrogen oxides shall comply with performance specification 2.

3.1.3 Continuous monitoring systems for measuring sulfur dioxide shall comply with performance specification 2.

3.1.4 Continuous monitoring systems for measuring oxygen shall comply with performance specification 3.

3.1.5 Continuous monitoring systems for measuring carbon dioxide shall comply with performance specification 3.

3.2 Exemptions

Any source which has purchased an emission monitoring system(s) prior to September 11, 1974, may be exempt from meeting such test procedures prescribed in sub-paragraph 3.1 of this rule for a period not to exceed five (5) years from plan approval or promulgation.

4.0 Minimum Data Requirements

The following paragraphs set forth the minimum data reporting requirements as necessary with this rule.

4.1 The owners or operators of facilities required to install continuous monitoring systems shall submit a written report of excess emissions for each calendar quarter and the nature and cause of the excess emissions, if known. The averaging period used for data reporting must correspond to the averaging period specified in the emission test method used to determine compliance with an emission standard for the pollutant source category in question. The required report shall, included as a minimum, the data stipulated in this rule.

4.2 For opacity measurements, the summary shall consist of the magnitude in actual percent opacity of all one-minute averages of opacity greater than the opacity standard in these regulations for each hour of operation of the facility. Average values may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four equally spaced, instantaneous opacity measurements per minute. The report should show all opacity averages in any one hour of 40% or greater minus the three minute exemption for opacity values which have been recorded at 40% or greater, but not greater than 60% opacity.

4.3 For gaseous measurements the summary shall consist of emission averages in the units of the applicable standard for each averaging period during which the applicable standard was exceeded.

4.4 The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks and the nature of system repair or adjustment shall be reported. The control officer may require proof of continuous monitoring system performance whenever system repairs or adjustments have been made.

4.5 When no excess emissions have occurred and the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be included in the report.

4.6 Owners or operators of affected facilities shall maintain a file of all information reported in the quarterly summaries, and all other data collected either by the continuous monitoring system or as necessary to convert monitoring data to the units of the applicable standard for a minimum of two years from the date of collection of such data or submission of such summaries.

5.0 Data Reduction

Owners or operators of affected facilities shall use the following procedures for converting monitoring data to units of the standard where necessary.

For fossil fuel-fired steam generators the following procedures shall be used to convert gaseous emission monitoring data in parts per million to g/million cal (lb/million Btu) where necessary.

5.11 When the owner or operator of a fossil fuel-fired steam generator elects under sub-paragraph 2.1.4 of this rule to measure oxygen in the flue gases, the measurements of the pollutant concentration and oxygen concentration shall each be on a dry basis and the following conversion procedure used:

$$E = CF\left(\frac{20.9}{20.9 - \%O_2}\right)$$

5.12 When the owner or operator elects under sub-paragraph 2.1.4 of this rule to measure carbon dioxide in the flue gases, the measurement of the pollutant concentration and the carbon dioxide concentration shall each be on a consistent basis (wet or dry) and the following conversion procedure used:

$$E = CF_e \left(\frac{100}{\%CO_2} \right)$$

5.13 The values used in the equations under paragraph 5.1 are derived as follows:

E = pollutant emission, g/million, cal (lb/million Btu);

C = Pollutant concentration, g/dscm (lb/dscf), determined by multiplying the average concentration (ppm) for each hourly period by 4.16×10^{-5} m g/dscm per ppm (2.64×10^{-9} M lb/dscf per ppm) where M = pollutant molecular weight, g/g - mole (lb/lb-mole), M = 64 for sulfur dioxide and 46 for oxides of nitrogen;

$\%O_2$, $\%CO_2$ = Oxygen or carbon dioxide volume (expressed as percent) determined with equipment specified under paragraph 4.1.4 of this rule;

F, F_c = A factor representing a ratio of the volume of dry flue gases generated to the calorific value of the fuel combusted (F), and a factor representing a ratio of the volume of carbon dioxide generated to the calorific value of the fuel combusted (F_c) respectively. Values of F and F_c are given in § 60.45 (f) of part 60, as applicable.

5.2 For sulfuric acid plants the owner or operator shall:

5.21 Establish a conversion factor three times daily according to the procedures of § 60.84 (b) of Chapter 1, Title 40, Code of Federal Regulations:

5.22 Multiply the conversion factor by the average sulfur dioxide concentration in the flue gases to obtain average sulfur dioxide emission in Kg/metric ton (lb/short ton); and

5.23 Report the average sulfur dioxide emission for each averaging period in excess of the applicable emission standard in the quarterly summary.

5.3 For nitric acid plants the owner or operator shall:

5.31 Establish a conversion factor according to the procedures of § 60.73 (b) of Chapter 1, Title 40, Code of Federal Regulations;

5.32 Multiply the conversion factor by the average nitrogen oxides concentration in the flue gases to obtain the nitrogen oxides emissions in the units of the applicable standard;

5.33 Report the average nitrogen oxides emission for each averaging period in excess of applicable emission standard in the quarterly summary.

5.4 The control officer may allow data reporting or reduction procedures varying from those set forth in this rule if the owner or operator of a source shows to the satisfaction of the control officer that his procedures are at least at accurate as those in this rule. Such procedures may include, but are not limited to the following:

5.41 Alternative procedures for computing emission averages that do not require integration of data (e.g., some facilities may demonstrate that the variability of their emissions is sufficiently small to allow accurate reduction of data based upon computing averages from equally spaced data points over the averaging period).

5.42 Alternative methods of converting pollutant concentration measurements to the units of the emission standards.

Rule 42. TESTING AND SAMPLING

A. It shall be the responsibility of the owner or operator of an air contaminant emissions source to, and he shall, provide at his expense necessary and conveniently located utilities, reasonable and necessary for uniformity of gas flow, and safe access thereto to permit technically valid samples and measurements of the emissions to be taken at reasonable times and under reasonable conditions.

B. In the event the existing facilities for sampling or testing and the access thereto are inadequate to permit the tanking of technically valid samples and measurements, the Control Officer shall notify the source owner or operator, in writing, of the required size, number, and location of sampling holes; required size and location of the sampling platform; required access to the sampling platform; and the required utilities for operating the sampling and testing equipment and the required schedule for providing these facilities. The source owner or operator shall furnish such facilities as required in accordance with the schedule outlined by the Control Officer.

? Abcor-
review.

Rule 43 RIGHT OF INSPECTION

The Air Pollution Control Officer during reasonable hours, for the purpose of enforcing and administering these Regulations, or any provision of the Arizona Revised Statutes relating to the emission or control of air contaminants, or of any order, regulation or rule prescribed pursuant thereto, may enter every building, premises, or other place, except a building designed for and used exclusively as a private residence. Every person is guilty of a misdemeanor pursuant to Arizona Revised Statute 36-789.01 who in any way denies, obstructs, or hampers such entrance or inspection by the Control Officer or his authorized representative.

REGULATION V UNLAWFUL OPEN BURNING

Rule 50. OPEN OUTDOOR FIRES

It shall be unlawful for any person to ignite or maintain any open outdoor fire within the limits of Maricopa County, except as provided in this section.

Rule 51. EXCEPTIONS

A. Fires used only for the domestic cooking of food, for providing warmth for human beings, for recreational purposes and for the branding of animals, or the use of orchard heaters for the purpose of frost protection in farming or nursery operations.

B. Any exception permitting open burning granted to Arizona State Law shall stipulate the conditions and time most advantageous for minimizing air pollution and protecting the health, safety and comfort of persons from the effects of the burning. The Control Officer may designate a public official as his representative to issue such a permit on forms provided by the Control Officer. Fires permitted subject to these stipulations are:

1. Fires declared as necessary in writing to the Control Officer by:

   a. The County Agricultural Agent or State Entomologist when such burning has been determined and certified by actual investigation as essential for the purpose of disease and/or pest prevention.

   b. Any public official in the performance of official duty for the control of weeds, the prevention of a fire hazard, the disposal of dangerous material where no alternative exists, or instruction in the fighting of fires.

   c. The Federal Government or any of its departments, agencies, or agents, the State or any of its agencies, departments, or subdivisions, for the purpose of watershed rehabilitation or control through vegetative manipulation.

2. Fires permitted by the Control Officer for the burning of agricultural ditch banks, fence rows and canal laterals using high temperature mechanical burners where no reasonable mechanical, chemical or other methods of removal are available; and where other reasonable methods are not available for the destruction of tumbleweeds after they have been piled. For the purpose of this section, "fence row" means a lateral area not to exceed two and one half feet on either side of the center line of a fence.

3. Fires permitted by the Control Officer for the purpose of bonafide land clearance for construction or agricultural uses in non-urban areas of low population density where no reasonable alternative exists. Permits shall be limited to the burning of trees and brush which are placed in piles of a size stipulated by the Control Officer and burning shall be conducted during hours and meteorological conditions determined by the Control Officer to be most likely to minimize adverse effects of resulting air contaminants.

4. A fee of $5.00 will be charged for burning permits issued by the Control Officer.

Rule 52. CONDITIONS

A. The issuance by the Control Officer of a permit to burn does not release the permittee from any of the requirements of a fire department having jurisdiction, and a permit so issued must be validated by such fire department to be effective. Open burning at a time or in a manner contrary to the stipulations of the Control Officer shall constitute a violation of this section.

Rule 53. NOTICE TO APPEAR

A. Peace Officers and the Control Officer and his deputies shall have the authority to issue a notice to appear under the same conditions and procedures set forth in Section 13-1422 for any violation of Regulation V. (Arizona Revised Statute 36-789G)

REGULATION VI VIOLATIONS

Rule 60. ORDER OF ABATEMENT: HEARINGS

A. When the Control Officer has reasonable cause to believe that any person is violating any provision of these Rules and Regulations or any requirement of an Operating or Conditional Permit issued pursuant to these Rules and Regulations, he may forthwith serve upon such person by Registered or Certified mail or in person an Order of Abatement or file a complaint alleging violations, or both. The Order shall state with particularity the act being done that constitutes the violation, shall state in its entirety the certain requirement, provision or rule or regulation being violated, and that the alleged violate is entitled to a hearing if such hearing is requested inwriting within twenty (20) days after the date of issuance of the Order, the Order may be conditional and require a person to refrain from the particular acts unless certain conditions are met. (Arizona Revised Statute 36-781)

B. Hearings on Orders of Abatement

1. An Order of Abatement issued by the Control Officer shall become effective immediately upon the expiration of the time during which a request for a hearing may be made unless the person or persons named in such order shall have made a timely request for a hearing before the Hearing Board. If a hearing is requested, the Hearing Board shall hold the hearing within thirty (30) days from receipt of the request unless such time is extended by the Hearing Board. Written notice of the time and place of the hearing shall be sent by the Hearing Board to the person or persons requesting the hearing and to the Control Officer at least fifteen (15) days before the hearing. (Arizona Revised Statute 36-782)

2. If the Board, after the hearing, determines that the act or acts set forth in the Order constitute a violation of any provision of these Rules and Regulations or any requirement of an Operating or Conditional Permit issued pursuant to these Rules and Regulations and that no Conditional Permit is justified, the Board shall affirm or modify the Order for Abatement. The Order may be conditional and require a person to refrain from the particular act or acts unless certain conditions are met. (Arizona Revised Statute 36-782)

Rule 61. CONDITIONAL PERMIT: PETITION FOR CONDITIONAL PERMIT

A. The Hearing Board may grant to any person one Conditional Permit for each air pollution source which allows such person to vary from certain requirements of these Rules and Regulations if the Hearing Board finds that additional time is needed for compliance and, upon the basis of evidence presented to it, that the Conditional Permit, if granted, will not unduly endanger human health or safety either directly or indirectly.

B. Petition for Conditional Permit

1. A person who seeks a Conditional Permit shall file a petition together with a fee of $35.00 with the Hearing Board. Within thirty (30) days after the filing of a petition for Conditional Permit, the Hearing Board shall set a hearing date. The Hearing date shall be within sixty (60) days after the filing of the petition.

2. Notice of the filing of a petition for a Conditional Permit and of the hearing date on said petition shall be published in the manner provided in Regulation VI, Rule 65.

3. The hearing on the petition for the Conditional Permit shall be public. (Arizona Revised Statute 36-784.01)

Rule 62. APPEALS TO THE HEARING BOARD

A. Within ten (10) days after notice is given by the Control Officer of denial or revocation of a permit, the applicant may petition the Hearing Board, in writing, for a public hearing, which shall be held within thirty (30) days after receipt of the petition. The Hearing Board after notice and a public hearing, may sustain, modify or reverse the action of the Control Officer. (Arizona Revised Statute 36-779.03)

Rule 63. DECISIONS ON PETITIONS FOR CONDITIONAL PERMIT: TERMS AND CONDITIONS OF CONDITIONAL PERMIT

A. Within thirty (30) days after the conclusion of the hearing on the petition for a Conditional Permit, the Hearing Board shall deny the petition or grant the petition on such terms and conditions as it deems appropriate.

B. The terms and conditions which may be imposed as a condition to the granting of the continued existence of a Conditional Permit shall include but not be limited to:

-130

1. A detailed plan, not to exceed one year in duration, for completion of corrective steps needed to conform to the requirements of these Rules and Regulations.

2. Such written reports as may be required.

3. The right to make periodic inspection of the facilities for which the Conditional Permit is granted.

C. The fee for a Conditional Permit shall be the same as an Operating Permit and shall be good for one year, pursuant to Arizona Revised Statute 36-784.02.

D. A Conditional Permit, and any extension thereof, shall be valid for such period as the Hearing Board prescribes but in no event for more than one (1) year from the date of initial issuance. (Arizona Revised Statute 36-784.03)

E. Suspensions and revocation of Conditional Permit - If the terms and conditions of the Conditional Permit are being violated, the Control Officer may seek to revoke or suspend the Conditional Permit granted. In such event, the Control Officer shall serve notice of such violations on the holder of the Conditional Permit in the manner provided in Regulation VI, Rule 60 of this section. The notice shall specify the nature of such violation and the date on which a hearing will be held by the Hearing Board to determine if such a violation has occurred and whether the Conditional Permit should be suspended or revoked. The date of said hearing shall be within thirty (30) days from the date said notice is served upon the holder of the Conditional Permit.

Rule 64. DECISIONS OF HEARING BOARD; SUBPOENAS; EFFECTIVE DATE

A. All decisions of the Hearing Board, including the majority opinion and all concurring and dissenting opinions, shall be in writing and shall be of public record.

B. A majority of the total membership of the Hearing Board shall concur in a decision for it to have effect.

C. The Chairman, or in his absence, the Vice Chairman may issue subpoenas to compel attendance of any person at hearing and require the production of books, records, and other documents' material to a hearing. Obedience to subpoenas may be enforced pursuant to Section 12-2213, Arizona Revised Statutes.

D. Decisions of the Hearing Board shall become effective not less than thirty (30) days after they are issued unless:

1. re-hearing is granted which shall have the effect of staying the decision.

2. It is determined that an emergency exists which justifies an earlier effective date.

E. The Hearing Board may revoke or modify an Order of Abatement, a permit or a Conditional Permit only after first holding a hearing within thirty (30) days from the giving of notice of such hearing. (Arizona Revised State Statute 36-785)

Rule 65. NOTICE OF HEARING; PUBLICATION; SERVICE

A. Any notice of Hearing required by these Rules and Regulations shall be given by publication of a Notice of Hearing for at least two (2) times in a newspaper of general circulation published in an adjoining county, and by posting copies of the petition and notice in at least three (3) conspicuous places in the county.

B. If the hearing involves any violation of these Rules and Regulations or a Conditional Permit issued pursuant thereto, then in addition to the requirements of Paragraph A of this Rule, the person allegedly committing or having committed the violation or requesting the Conditional Permit, shall be served personally or by Registered mail or Certified mail at least fifteen (15) days prior to the hearing with a written Notice of Hearing.

Rule 66. INJUNCTIVE RELIEF

Upon the failure or refusal of a person to comply with an Order for Abatement by the Hearing Board or the Control Officer in cases where an Order for Abatement has become effective, an action may be filed in the Superior Court to restrain and enjoin the person from engaging in further acts violating the Order of Abatement. The Court shall proceed as in other actions for injunctions.

Rule 67. MISDEMEANOR; PENALTY

A. Any person who violates any provision of these Rules and Regulations or any effective Order of Abatement issued pursuant to these Rules and Regulations is guilty of a misdemeanor punishable by imposition of a fine of not less than fifty ($50.00) dollars. Each day of violation shall constitute a separate offense.

REGULATION VII EMERGENCY PROCEDURES

Rule 70. EMERGENCY MEASURES

A. If the Control Officer determines that air pollution in any area constitutes or may constitute an emergency risk to the health of those in the area such determination and recommendation shall be immediately communicated to the Governor and the State Commissioner of Health requesting that appropriate action be initiated.

B. The Control Officer and his agents are hereby authorized to carry out orders issued by the Governor or the State Health Commissioner pursuant to air pollution emergency section Arizona Revised Statute 36-1719.

REGULATION VIII VALIDITY AND OPERATION

Rule 80. VALIDITY

A. If any section, subsection, clause or phrase or provision of these Rules and Regulations is held to be invalid for any reason, such decision shall not affect the validity of the remaining portion.

Rule 81. OPERATION

A. Nothing in these Rules and Regulations shall in any manner be construed as authorizing or permitting the creation or maintenance of a nuisance.

RULES AND REGULATIONS

MOHAVE COUNTY

SECTION 1 GENERAL

REG. 1 POLICY AND LEGAL AUTHORITY

A. The intent of these regulations is to correct, remove or prevent air pollution in all its forms, including smoke, vapors, dust, wind-borne matter, fumes and radioactive materials, originating within Mohave County.

B. These regulations are adopted pursuant to the authority granted by Title 36, Chapter 6, Article 8, Arizona Revised Statutes.

REG. 2 DEFINITIONS

In these regulations, unless the context otherwise requires:

1. "Advisory Council" means the Mohave County Air Pollution Control Advisory Council.

2. "Air contaminants" includes smoke, vapors, charred paper, dust, soot, grime, carbon, fumes, gases, mist, odors, particulate matter, wind-borne matter, radioactive materials, or noxious chemicals, or any other material in the outdoor atmosphere. ←

3. "Air pollution" means the presence in the outdoor atmosphere of one or more air contaminants or combinations thereof in such quantities and of such duration as are or may tend to be injurious to human, plant or animal life, or property. ←

4. "Agriculture" means the tilling of the soil, raising of crops, horticulture, viticulture, silvaculture, small livestock farming, dairying, and/or pasture and range livestock production, including all uses customarily incidental thereto but not including slaughter houses, fertilizer yards, or plants for the reduction of animal matter or any other industrial use which is similarly objectionable because of noise, odor, smoke, dust or fumes. Agriculture here shall mean a business or activity of main pursuit or livelihood.

5. "Control Officer" means the executive head of the Mohave County Health Department.

6. "Discharge" means the release, escape or emission of an air contaminant into the atmosphere so as to cause or contribute to air pollution. spare

7. "Hearing board" means the Mohave County Air Pollution Control Hearing board. ←

8. "Opacity" means a condition of the atmosphere, or any part thereof, in which it is partially or wholly impervious to rays of light. Opacity as used in these regulations refers to a condition

of the atmosphere which results in the obscuration of an observer's view.

9. "Open burning" means any combustion of combustible material of any type where the products of combustion are emitted into the atmosphere and are not directed through a stack or chimney.

10. "Particulate matter" means any discrete particles of material, other than uncombined water, which are carried in, suspended in or discharged into the atmosphere as a liquid or solid.

11. "Person" means any public or private corporation, company, partnership, firm, association or society of persons, the federal government and any of its departments or agencies, the state and any of its agencies, departments or political subdivisions, as well as a natural person.

12. "Process weight" means the total amount of all material introduced into an industrial operation or process, exclusive of liquid and gaseous fuels and air used to support combustion.

13. "Process weight per hour" means the total process weight for the entire period of operation or for a typical portion thereof, divided by the number of hours of each period or portion thereof. ←

14. "Ringelmann smoke chart" means the Ringelmann's scale for grading the opacity, appearance, density or shade of an emission as published by the U.S. Bureau of Mines, or any chart, recorder, indicator or device for the measurement of emission shade, density or opacity which is approved by the director as the equivalent of the Ringelmann's scale.

15. "Smoke" means small gas-borne particles, other than water, discharged into the atmosphere in sufficient quantities to be visible.

16. "Source" means and refers to any physical facility, arrangement, device, contrivance, condition or structure which may emit air contaminants.

17. "Standard conditions" means a gas temperature of 60 degrees Fahrenheit and a gas pressure of 14.7 pounds per square inch absolute. All analyses and tests shall be calculated and reported at standard gas temperature and pressure values.

REG. 3 AIR POLLUTION PROHIBITED

A. No person shall cause, suffer or allow to be discharged or emitted into the open air, air contaminants from any source whatever, either in quantity, or of a shade or appearance which is in excess of that specified in the subsequent regulations of this part.

B. Nothing in these regulations shall be interpreted to prevent the discharge or emission of uncontaminated aqueous steam to the open air.

REG. 4 ENFORCEMENT

These regulations shall be enforced according to the provisions of Title 36, Chapter 6, Article 8, Arizona Revised Statutes.

SECTION 2 CONTROL OF AIR CONTAMINANTS

REG. 1 SHADE, DENSITY OR OPACITY OF EMISSIONS

No person shall cause, suffer, allow or permit the discharge into the atmosphere from any single source of emission whatsoever any air contaminants for a period or periods aggregating more than three minutes in any one hour which is:

1. As dark as, or darker in shade than that designated as No. 2 on the Ringelmann Chart as published by the U.S. Bureau of Mines, or

2. Of an opacity equal to or greater than an air contaminant designated as No. 2 on the Ringelmann Chart.

REG. 2 PARTICULATE MATTER

A. No person shall cause or permit a building or its appurtenances or a utility or open area to be used, constructed, repaired, altered or demolished without taking all reasonable precautions to prevent particulate matter from becoming wind-borne or air-borne. Dust and other types of particulates shall be kept to a minimum by such measures as wetting down, covering, landscaping, paving, treating, or by other reasonable means, to the extent of each person's responsibility.

B. No person shall cause or permit the repair, construction or reconstruction of a road or alley without taking all reasonable precautions to prevent particulate matter from becoming wind-borne or air-borne. Dust and other particulates shall be kept to a minimum by employing temporary paving, dust palliatives, wetting down, detouring, or by other reasonable means to the extent of each person's responsibility.

REG. 3 REDUCTION OF ANIMAL OR VEGETABLE MATTER

No person shall operate or use any machine, equipment or other contrivance for the treatment or processing of animal or vegetable matter, separate or in combination, unless all gases, vapors and gas-entrained effluents from such operation, equipment or contrivance have been:

1. Incinerated at temperatures of not less than 1,200 degrees Fahrenheit for a period of not less than 0.3 second, or

2. Processed in a manner determined to be equally or more effective for the control of air pollution.

3. All persons owning or responsible for any process involving the reduction of animal and/or vegetable matter shall provide properly constructed facilities and install and maintain in a good working order such devices as are necessary to prevent emissions of air contaminants.

REG. 4 EVAPORATION AND LEAKAGE

Materials such as, but not limited to, solvent, or other volatile compounds such as paints, acids, alkalies, pesticides, fertilizer, and manure shall be processed, stored, used and transported in such a manner and by such means that they will not unreasonably evaporate, leak, escape, or be otherwise discharged into the ambient air so as to cause or contribute to air pollution; and, where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or discharge as determined by the director, the installation and use of such control methods, devices or equipment shall be mandatory.

REG. 5 STORAGE TANKS

A. No person shall place, store or hold in any reservoir, stationary tank, or other container having a capacity of sixty-five thousand or more gallons any gasoline or any petroleum distillate having a vapor pressure of 2.0 pounds per square inch absolute, or greater, under actual storage conditions, unless such tank, reservoir, or other container is a pressure tank maintaining working pressure sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere, or is equipped with one of the following vapor loss control devices, properly installed, in good working order and in operation:

   1. A floating roof consisting of a pontoon type or double-deck type roof, resting on the surface of the liquid contents and equipped with a closure seal to close the space between the roof eave and tank well, a vapor balloon or vapor dome, designed in accordance with accepted standards of the petroleum industry. The control equipment shall not be used if the gasoline or petroleum distillate has a vapor pressure of twelve pounds per square inch absolute, or greater, under actual conditions. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

   2. Other equipment proven to be of equal efficiency for preventing discharge of hydrocarbon gases and vapors to the atmosphere.

B. Any other petroleum storage tank which is constructed or extensively remodeled on or after the effective date of these regulations shall be equipped with a submerged filling device, or acceptable equivalent for the control of hydrocarbon emissions.

C. All facilities for dock loading of petroleum products, having a vapor pressure of 1.5 pounds per square inch absolute, or greater, at loading pressure shall provide for submerged filling, or acceptable equivalent for the control of hydrocarbon emissions.

SECTION 3 EMISSION STANDARDS

REG. 1 PARTICULATE MATTER FROM FUEL-BURNING INSTALLATIONS

A. This regulation applies to installations in which fuel is burned for the primary purpose of producing steam, hot water, hot air or other liquids, gases or solids and in the course of doing so, the products of combustion do not come into direct contact with process materials. Fuels include those such as coal, coke, lignite, coke breeze, fuel oil, and wood but do not include refuse. When any products or by-products of a manufacturing process are burned for the same purpose or in conjunction with any fuel, the same maximum emission limitations shall apply.

B. The heat content of coal shall generally be determined according to ASTM method D-271-64 Laboratory Sampling and Analysis of Coal or Coke or ASTM method D-21-5-62T Gross Calorific value of solid Fuel by the Adiabatic Bomb Calorimeter, which methods shall be used as guides, but these may be modified by the director to suit specific conditions or needs based upon good practice, judgment and experience.

C. For purposes of this regulation the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or stacks. The heat input value used shall be the equipment manufacturer's or designer's guaranteed maximum input, whichever is greater. The total heat input of all fuel-burning units on a plant or premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted.

D. The amount of particulate matter emitted shall generally be measured according to the American Society of Mechanical Engineer's Power Test Codes - PTC-27, dated 1957, entitled Determining Dust Concentrations in a Gas Stream, which codes shall be used as guides, but these may be modified by the director to suit specific conditions or needs based upon good practice, judgment and experience.

E. No person shall cause, suffer, allow or permit the emission of particulate matter, caused by combustion of fuel, from any fuel-burning operation in excess of the quantity set forth in the following table:

Heat input millions of British thermal units per hour	Maximum allowable emission of particulate matter in pounds per hour per million British thermal units of heat input based upon 24-hour arithmetic average
Less than 10	0.600
50	0.412
100	0.352
500	0.242 242 ←
1,000	0.207
4,000	0.150
8.000	0.102
10,000	0.0904
15,000	0.0717
20,000	0.0607
40,000	0.0409
50,000	0.0358
100,000	0.0243

F. Interpolation of the data in this table for heat inputs greater than ten but less than 4,000 million Btu per hour shall be accomplished by use of the equation $Y = (1.02)(X^{-0.231})$. Interpolation and extrapolation of the data for heat inputs equal to or greater than 4,000 million Btu per hour shall be accomplished by use of the equation $Y = (17.0)(X^{-0.568})$ where Y = allowable rate of emission in pounds per million Btu and X = maximum equipment capacity rate in million Btu per hour. ←

REG. 2 PARTICULATE MATTER FROM OTHER SOURCES

A. No person shall cause, suffer, or allow or permit the discharge of particulate matter into the atmosphere in any one hour from any source whatsoever, except incineration and fuel-burning equipment in total quantities in excess of the amount calculated by the equation presented below and as illustrated by the following table on the allowable rate of emission based on process and weight rate:

Process weight rate		Rate of emission	Process weight rate		Rate of emission
Lb/Hr	Tons/Hr	Lb/Hr	Lb/Hr	Tons/Hr	Lb/Hr
100	0.05	0.551	16,000	860000	16.5 5 ←
200	0.10	0.877	18,000	9.00	17.9
400	0.20	1.40	20,000	10.00	19.2
600	0.30	1.83	30,000	15.00	25.2
800	0.40	2.22	40,000	20.00	30.5
1,000	0.50	2.58	50,000	25.00	35.4
1,500	0.75	3.38	60,000	30.00	40.0
2,000	1.00	4.10	70,000	35.00	41.3
2,500	1.25	4.76	80,000	40.00	42.5
3,000	1.50	5.38	90,000	45.00	43.6
3,500	1.75	5.96	100,000	50.00	44.6
4,000	2.00	6.52	120,000	60.00	46.3

Process weight rate		Rate of emission	Process weight rate		Rate of emission
Lb/Hr	Tons/Hr	Lb/Hr	Lb/Hr	Tons/Hr	Lb/Hr
5,000	2.50	7.58	140,000	70.00	47.8
6,000	3.00	8.56	160,000	80.00	49.0
7,000	3.50 → period	9.49	200,000	100.00	51.3 → 51.2 ←
8,000	4.00	10.4	1,000,000	500.00	69.0
9,000	4.50	11.2	2,000,000	1,000.00	77.6
10,000	5.00	12.0	6,000,000	3,000.00	92.7
12,000	6.00	13.6			

B. To use the table, take the process weight per hour as defined in Reg. 2, Sec. 1 (13). Find this figure on the table, opposite which is the maximum number of pounds per hour which may be discharged into the atmosphere in any one hour. The method used for determining allowable rates of emission based on process weight tables is as follows:

Interpolation of the data in the process weight table for process weight rates up to 60,000 lb/hr shall be accomplished by use of the equation $E=4.10\ p^{0.67}$, and interpolation and extrapolation of the data for process weight rates in excess of 60,000 lb/hr shall be accomplished by the use of the equation $E=55.0\ p^{0.11}-40$, where E = rate of emission in lb/hr and p = process weight rate in tons/hr. (See following examples.)

EXAMPLE A: Process weight = 6 tons per hour
Equation: $E = 4.10\ p^{0.67}$
Log E = Log 4.10 + (0.67) (Log 6)
Log E = 0.6128 + (0.67) (0.7782)
Log E = 0.6128 + 0.5214
Log E = 1.1342
E = Anti-log 1.1342
E = 13.6 pounds per hour

EXAMPLE B: Process weight (p) = 60 tons per hour
Equation: $E = 55.0\ p^{0.11} - 40.0$
Log (E + 40.0) = Log 55.0 + (0.11) (Log 60)
Log (E + 40.0) = 1.7404 + (0.11) (1.7782)
Log (E + 40.0) = 1.7404 + 0.1956
Log (E + 40.0) = 1.9360
(E + 40.0) = Anti-log 1.9360
(E + 40.0) = 86.3
E = 86.3-40.0
E = 46.3 pounds per hour

Add

Insert D

REG. 5 INCINERATORS

A. No person shall cause, suffer or allow to be emitted into the atmosphere, from any incinerator or to pass a convenient measuring point near the incinerator stack outlet, flyash in gases to exceed 0.20 pounds per 1,000 pounds of gases.

B. Notwithstanding the provisions of Section 2, Regulation 1, no person shall cause, suffer or allow to be emitted into the atmosphere from any incinerator smoke the appearance, density, opacity or shade of which is as dark as No. 1 of the Ringelmann Scale.

SECTION 4 TESTING AND SAMPLING FACILITIES

FACILITIES

change word

REG. 1 RESPONSIBILITY

It shall be the responsibility of the owner or operator of an air contaminants emissions source to provide, at his expense, necessary and conveniently located utilities, reasonable and necessary test openings in the system or stack, other than testing or sampling equipment, to permit valid samples and measurements of the emissions to be taken by the director.

REG. 2 REQUIREMENTS

In the event the existing facilities for sampling and testing are inadequate, the control officer shall notify the source owner or operator in writing, of the required size, location and number of sampling holes, necessary utilities and adequate and safe sampling platform, and these shall be provided by the owner.

SECTION 5 OPEN FIRES

REG. 1 PROHIBITION AND EXCEPTIONS

It shall be unlawful for any person to ignite, cause to be ignited, direct to be ignited, or suffer or allow any open outdoor fire within Mohave County except as provided in this regulation.

A. Fires used only for the domestic cooking of food, for providing warmth for human beings, for recreational purposes and for the branding of animals may be conducted without permit, provided they do not create a public nuisance.

B. All other excepted open burning must be under written permit issued by the control officer who will determine the conditions and time most advantageous for minimizing air pollution and protecting the health, safety and comfort of persons from the effects of the burning. The control officer may designate a public official as his representative to issue such a permit on forms provided by the control officer. Fires permitted subject to these stipulations are:

1. Fires declared as necessary in writing to the director by:
    - a. The State Entomologist as essential for the purpose of disease and/or pest prevention.
    - b. Any public official in the performance of official duty for the control of weeds, the prevention of a fire hazard, the disposal of dangerous material where no alternative exists, or instruction in the fighting of fires.

c. The federal government or any of its departments, agencies or agents, the state or any of its agencies, departments or subdivisions, for the purpose of watershed rehabilitation or control through vegetative manipulation.

2. Fires permitted by the control officer for the burning of ditch banks, fence rows, canal laterals and tumbleweeds, in conjunction with and customarily incidental to agricultural land use, where reasonable removal is not indicated; this is to be accomplished with a high temperature mechanical burner.

C. The issuance by the control officer of a permit to burn does not release the permittee from any of the requirements of a fire department having jurisdiction, and a permit so issued must be validated by such fire department to be effective.

SECTION 6 AMBIENT AIR QUALITY STANDARDS

REG. 1 SULFUR DIOXIDE

A. Maximum annual average - Limit of 50 micrograms per cubic meter.

B. Maximum 24-hour average - Limit of 250 micrograms per cubic meter.

C. Maximum 1-hour average - Limit of 850 micrograms per cubic meter.

D. Maximum any 3 consecutive days - Limit 120 micrograms per cubic meter. ←

should be 120

REG. 2 NON-SPECIFIC PARTICULATE

A. Maximum annual geometric mean - Limit of 70 micrograms per cubic meter.

REG. 3 EVALUATION

The evaluation of air quality in terms of procedure, methodology and concept is to be consistent with the guidelines of the National Air Pollution Control Administration.

REG. 4 ANTI-DEGRADATION

These standards shall not be construed as permitting the degradation of air quality in any area of the State.

SECTION 7 VIOLATIONS

A. Violations of any of these regulations is a misdemeanor and punishable as provided in Section 13-1645, Arizona Revised Statutes. Each day a violation continues shall be considered a separate violation.

B. Violations of any of these regulations may be enjoined in a Superior Court action brought by an individual or by the control officer.

RULES AND REGULATIONS
PIMA COUNTY AIR POLLUTION CONTROL DISTRICT

REGULATION I GENERAL PROVISIONS

underline

Rule 1. EMISSIONS REGULATED; POLICY; LEGAL AUTHORITY

A. These Rules and Regulations shall supplement and implement the Pima County Air Pollution Control District Ordinance and shall apply to all types of air contaminant emissions.

B. The purpose of these Rules and Regulations is to prevent or to reduce and control air pollution in all its forms originating within the bounded area of the Pima County Air Pollution Control District.

C. These Rules and Regulations are adopted pursuant to the authority granted by Section 36-779, Arizona Revised Statutes.

Rule 2. DEFINITIONS

The words and phrases used in these Rules and Regulations shall have the following meanings, except where the context otherwise indicates:

a. Air contaminants - any smoke, vapors, charred paper, dust, soot, grime, carbon, fumes, gases, sulfuric acid mist aerosols, aerosol droplets, odors, particulate matter, windborne matter, radioactive materials, or noxious chemicals, or any other material in the outdoor atmosphere.

b. Air pollution - the presence in the outdoor atmosphere of one or more air contaminants or combinations thereof in sufficient quantities, which either alone or in connection with other substances, by reason of their concentration and duration are or tend to be injurious to human, plant or animal life, or causes damage to property, or unreasonably interferes with the comfortable enjoyment of life or property of a substantial part of a community, or obscures visibility, or which in any way degrades the quality of the ambient air below the standards established by the Board of Supervisors.

c. Approved - approved "by the Control Officer." Any word implying acceptance, reasoning, or judgment shall mean "by the Control Officer."

d. Atmosphere - the air that envelops or surrounds the earth. Where air contaminants are emitted into a building or structure not designed specifically as a piece of air pollution control equipment, such an emission into the building or structure shall not be considered an emission into the atmosphere unless such emission subsequently is released or permitted to escape from the building.

e. Board of Supervisors - the Pima County Board of Supervisors.

f. Cause or permit - to effect by action or participation, or by command, authority, or force; or to allow, make possible, or consent to, either formally or passively.

g. Control equipment - any equipment which has the function of controlling the emissions from process, fuel-burning, or other equipment to reduce the creation of, or the emission of, air contaminants into the atmosphere, or both.

h. Control Officer - The executive head of the Pima County Air Pollution Control District, who shall be the Director of the Pima County Health Department, or his delegated representative.

i. County - Pima County, Arizona.

j. Department - the Pima County Health Department.

k. Discharge - the release, escape or emission of an air contaminant into the atmosphere so as to cause or contribute to air pollution.

l. District - the Pima County Air Pollution Control District, consisting of all area lying within the territorial limits of Pima County.

m. District Ordinance - the Pima County Air Pollution Control District Ordinance.

n. Dusts - minute solid particles released into the air by natural forces or by mechanical processes.

o. Dust suppressant - any chemical compound with specific capabilities for dust suppression. Water, under some circumstances, to be used in adequate quantities throughout the term of an operation, process or project may be accepted by the Control Officer as an approved dust suppressant.

p. Effluent - the total volume of gases, liquids, and particulate matter emitted from an emission source.

q. Emission - the passing into the atmosphere of an air contaminant or an effluent which contains or may contain an air contaminant; or the air contaminant passes to the atmosphere.

r. Equipment - any machine, equipment, incinerator, device or other article.

s. Fuel-burning equipment - any equipment, device, or contrivance and all appurtenances thereto used primarily but not exclusively, to burn any fuel for the purpose of indirect heating in which the material being heated is not contacted by and adds no substances to the products of combustion.

t. Fugitive dust - solid air-borne particulate matter emitted from any source other than a flue or stack.

u. Hearing Board - the hearing board of the District.

v. Incinerator - any equipment, device or contrivance and all appurtenances thereof used solely for the destruction of combustible solid or gaseous wastes by burning.

w. Mobile equipment - any equipment which is capable of being operated at more than one site location, and which is self-propelled in operation but not required to be registered under Arizona State Uniform Motor Vehicle Act.

x. Motor vehicle - a self-propelled vehicle for use on the public roads and highways of the State of Arizona, and required to be registered under the Arizona State Uniform Motor Vehicle Act.

y. Opacity - the state of a substance which renders it partially or wholly impervious to rays of light and causes obscurity of an observer's view.

z. Open outdoor fire - any combustion of combustible materials of any type outdoors, in the open where the products of combustion are not directed through a flue.

aa. Operation - any physical action, resulting in a change in the location, form, or physical properties of a material, or any chemical or mechanical action resulting in a change in the chemical composition or chemical or physical properties of a material.

bb. Particulate matter - any discrete particles of material, other than uncombined water, which are or have been carried in, suspended in, or discharged into the atmosphere as a liquid or solid, or combination thereof.

cc. Permit unit - a unit consisting of an item of equipment which is operated separately or two or more items of equipment which are operated as a functional unit for the processing of material and are physically united by conveyor, chute, duct, pipe or hose for the movement of process material. A permit unit shall be considered as encompassing all the equipment used from the point or points of initial material feed to the point or points of termination where the process flow of material will be or can be interrupted, or to the point or points of discharge where such discharge will be stored, go into a different permit unit group, be physically separated from the equipment of the permit unit group, or be discharged into the atmosphere.

dd. Person - any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, agency, political subdivision of the State, the Federal government, or any legal successor, representative, agent or agency of the foregoing.

ee. Portable equipment - any equipment which is capable of being operated at more than one site location and which is not self-propelled in operation.

ff. Process - a continuous operation or treatment (as in manufacture).

gg. Process weight - the total weight of all materials introduced into a source operation, including solid fuels, but excluding liquids and gases used solely as fuels, and excluding air introduced for purposes of combustion.

hh. Process weight rate - the total process weight for a representative period of operation divided by the number of hours of that period, excluding any time during which the equipment is idle.

ii. Regulations - one of the major groupings of the rules of the District.

jj. Ringelmann Chart - a chart for grading the appearance, density, or shade of a stack plume, as published, with instructions for use, by the U.S. Bureau of Mines Information Circular 8333.

kk. Rule - a rule of the District.

ll. Source - any physical arrangement, facility, structure, activity, or person that may emit air contaminants.

mm. Submerged fill pipe - any fill pipe or nozzle which meets any of the following conditions:

1. The bottom of the fill pipe or nozzle is below the surface of liquid in the receiving vessel for at least 55% of the volume filled.
2. The bottom of the fill pipe or nozzle is less than six inches from the bottom of the receiving vessel.
3. The bottom of the fill pipe or nozzle is less than two pipe or nozzle diameters from the bottom of the receiving vessel.
4. Other conditions acceptable to the Control Officer.

nn. Written report - a written report "to the Control Officer." Any report, plan, record, data, or other information implied to be submitted shall mean "to the Control Officer."

oo. Temporary Burning - any open burning other than agricultural burning for which a permit may be issued in accordance with Regulation II, Rule 8.

pp. Mining Activity - any activity involving earthmoving operations for the primary purpose of extraction of minerals from the earth such as (but not limited to) sand, gravel, aggregate, limestone, rock or ore.

qq. Scrap Metal Sweater - a furnace designed to melt metallic scrap for the purpose of recovering metal.

rr. Paved Parking Lot - any geographical area which has been covered with asphalt or cement type concrete or chemical stabilizing agents in such a way and maintained to such an extent that normal use of the area by any motorized vehicle does not produce visible emission of dust or other particulate matter from the paved surface. (For the purpose of this definition, occasional deposits of wind-blown dust or dust resulting from erosion by rainfall or flooding or sweepings of street cleaning operations onto the surface of the area to be excluded in the determination of visible emissions from the surface.)

ss. Unpaved Parking Lot - any geographical area that is regularly used for the parking of vehicles, and which cannot be classified as a paved parking lot according to the definition stated in paragraph rr of this rule.

tt. Device, Machine, Equipment, or Other Article - any assembly mechanism, or activity which may cause or contribute to air pollution or which is used primarily to prevent the emission of air pollutants.

uu. Shutdown - the cessation of operation of any process, fuel-burning or control equipment, or related operating equipment for any purpose.

vv. Startup - the setting in operation of any process, fuel-burning or control equipment, or related operating equipment, to a point where the affected facility or process is operating in the planned or normal manner. Startup may be a single smooth sequence of events, or alternatively, may require several attempts and is not necessarily of predictable duration.

ww. Malfunction - any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation, or any other preventible equipment breakdown shall not be considered malfunctions.

xx. Scheduled Maintenance - normal, intermittent operations of a routine maintenance nature which are necessary to insure the operational reliability of an installation.

yy. Ambient Air - that portion of the atmosphere, external to buildings, to which the general public has access.

(2.0) Rule 3. STANDARD CONDITIONS

Standard conditions are a gas temperature of 60 degrees Fahrenheit and a gas pressure of 14.7 pounds per square inch absolute. Results of all analyses and tests shall be calculated and reported at this gas temperature and pressure.

(3.0) Rule 4. PERMITS; EXCEPTIONS; APPLICATIONS; FEES

A. Any person erecting, installing, replacing or making a major alteration to any machine, equipment, incinerator, device or other article which may cause or contribute to air pollution or the use of which may eliminate or reduce or control the emission of air pollutants, shall first obtain an installation permit from the Control Officer. An installation permit shall remain in effect until the operating permit for such equipment is granted or denied or the application is cancelled. The provisions of this rule shall not apply to motor vehicles, to agricultural vehicles or agricultural equipment which, in the aggregate with other such equipment of the applicant at the same location or property other than a one or two-family residence, is rated at less than five hundred thousand British Thermal Units per hour.

B. Before any equipment described in Action A of this Rule, in existence or in operation at the time of, or subsequent to, the effective date of these Rules and Regulations, may be operated or used, an operating permit shall be obtained in writing from the Control Officer. No such operating permit shall be granted either by the Control Officer or the Hearing Board for such equipment as described in Section A of this rule that is or has been constructed or installed without an installation permit until the necessary information is presented to the Control Officer, an installation permit is obtained, and such equipment is altered, if necessary, and made to conform to the applicable standards.

C. Every application for an installation permit or an operating permit shall be filed in the manner and form prescribed by the Control Officer, and shall contain all the information necessary to enable the Control Officer to make the determination to grant or deny such application. The Control Officer may require that such application include all equipment that is used by the applicant in a certain process or a single facility or location. Before acting on an application for an installation permit or an operating permit, the Control Officer may require the applicant to furnish further information or further plans or specifications. The Control Officer shall act, within a reasonable time, not to exceed thirty days, on such applications and shall notify the applicant in writing of his approval or denial of such application; provided, however, that the Control Officer may have a reasonable period of time, not to exceed six months from the effective date of this section, in which to gather information, inspect premises, and issue such permits.

D. Permits issued pursuant to this rule may be issued subject to such terms and conditions as the Control Officer deems necessary for the control of air pollution and subject to payment of permit fees in accordance with the fees of Rule 4E, Rule 4J, and Rule 30. Equipment operating permits issued pursuant to these rules shall be renewed annually on the anniversary date of the issuance of the permit, subject to compliance with these Rules and Regulations and the provisions of the District Ordinance upon payment of annual renewal fee. Where an operating permit is granted for equipment erected, installed, or replaced on the site location of an existing operating permit of the same permittee, the annual renewal date of the new permit shall be the anniversary date of the existing permit and the operating permit fee shall be prorated from the date of issuance of that anniversary date. The funds received for permits issued pursuant to these Rules and Regulations shall be deposited in a special Pima County Air Pollution Control District fund and shall be used by the Control Officer to defray the costs incurred pursuant to the District Ordinance or these Rules and Regulations.

E. No person shall cause or permit the use of any equipment to clear or level land, or engage in earthmoving, including excavation, demolition, blasting, trenching, or road construction until he has ascertained that a land preparation, earthmoving, demolition, blasting, trenching, or road construction permit has been issued by the Control Officer on forms of the District. The permit may be issued subject to the conditions that the permittee employ such dust control measures as the Control Officer deems reasonably necessary for the control of air pollution during the use of such equipment, and afterward for such extended period as the Control Officer may designate. The permits for these activities may be obtained by either the owner, lessee, developer, or prime contractor. The provisions of this rule shall not apply to:

a. normal cultural farm practices

b. trenching for distances aggregating less than 300 feet in one contiguous area.

c. earthmoving or land preparation activities where the total contiguous area is one acre (43,560 sq.ft.) or less

Permits for these activities shall be issued subject to payment of permit fees according to the following schedules:

SCHEDULE A

Earthmoving and Land Preparation Activities

One dollar and fifty cents per acre with a minimum fee of $15.

SCHEDULE B

Demolition Activities

Total Interior Floor Areas under Roof- in Square Feet* Per Each Individual Structure to be Demolished	Fee $
Less than 2,500	15
2,500 to 5,000	26
Greater than 5,000	38

*Floor areas to be aggregated for multi-story buildings

SCHEDULE C

Trenching Activities*

Eight dollars per 1,000 feet of aggregated length of trenching in any one contiguous area with a minimum fee of $15.

*This fee schedule shall not apply when a valid earthmoving permit (Schedule A) has been issued covering the same location or property.

SCHEDULE D

Blasting Activities and/or Charge Hole Drilling*

Eleven dollars plus $1.50 per each day on which blasting is to be conducted.

*This schedule shall not apply to blasting activities associated with mining operations requiring a mining activity operating permit as defined in Schedule III, Rule 4J, Regulation I.

SCHEDULE E

Earth Moving Activities for Road Construction Only*

Four dollars per thousand feet of length with a minimum fee of $15.

*This fee schedule shall not apply when a valid earth moving permit (Schedule A) has been issued for the same location or property.

F. No permit shall be valid until the applicable permit fee has been received and the permit issued by the District. An operating permit shall be automatically revoked on the anniversary date of the issuance of the permit if the permit renewal fee has not been received by the District by that date and the Control Officer shall so notify the permittee by registered or certified mail.

G. No person shall cause or permit the use or operation of a new or existing source if the Control Officer has denied or revoked the permit for the source.

H. The issuance of permits and the approval of plans under these Rules and Regulations shall not relieve the permittee from compliance with any law or these Rules and Regulations, nor does any other law or building permit relieve any person from obtaining an installation permit, an operating permit, or a land preparation; earth moving; demolition permit required under these Rules and Regulations.

I. An open burning permit shall be required for any open burning authorized under the exceptions in Rule 8 of Regulation II of these Rules and Regulations.

J. Owners or operators of air pollution emissions sources in the categories shown in the following fee schedules shall obtain Racing Event Site Operating Permit or an Unpaved Parking Operating Permit or a Mining Activity Operating Permit in writing from the Control Officer prior to engaging in any of the type of activities identified by the applicable fee schedule. Every application for a Racing Event Site Operating Permit or an Unpaved Parking Lot Operating Permit or a Mining Activity Operating Permit shall be filed in the manner and form prescribed by the Control Officer and shall contain all the information necessary to enable the Control Officer to make the determination to grant or deny such application. Before acting on such applications, the Control Officer may require the applicant to furnish information on the activity such as the number of vehicles involved in the activity, etc. Existing source shall be required to obtain these permits withing 120 days after the effective date of this regulation, and new activities shall obtain the operating permits prior to engaging in any of the activities described. In cases where it is not practicable for the applicant to compile the information required for the permits within 120 days, the time allowable for these particular permits may be extended by the Control Officer for reasonable cause. These permits shall be issued subject to payment of an annual permit fee in accordance with the following fee schedules:

delete

SCHEDULE I

RACING EVENT SITE OPERATING PERMITS

Racing Event Site Operating Permits are required under this schedule for Racing Event Sites which include unpaved areas used by animals or vehicles. The permit shall apply to racing areas, parking areas, roadways, and stable or exercise areas used by the racing complex.

Annual permit fees shall be assessed in the amount of $55 for each event site location.

SCHEDULE II

UNPAVED PARKING LOT OPERATING PERMITS*

Unpaved Parking Lot Operating Permits are required under this schedule for unpaved parking lots capable of providing parking spaces for more than five motor vehicles.

Size	Annual Fee $
Less than one acre	20
1 acre or greater	40

*This schedule shall not apply if a valid permit has been issued under Schedule I covering the same location or property.

SCHEDULE III

MINING ACTIVITY OPERATING PERMITS

Mining Activity Operating Permits are required under this schedule for all mining activities capable of emitting dust or other particulate matter to the atmosphere. These permits apply to the earth moving activities associated with the use of mobile or stationary equipment, roads, and all other activities in the mine pit directly related to the mining phase of the operation. (Permits are not required for the equipment used during the primary earth moving operations. Equipment used in the subsequent handling and/or processing of the mined material may rquire separate operating permits according to schedules contained in Regulation I, Rule 30.)

Amount of Material Mined Annually	Fee $
0 to 50,000 cubic yards	20
Greater than 50,000 cubic yards	20 plus 7.5¢ per 1,000 cubic yards of material in excess of 50,000 cubic yards

For mining activities which are conducted with blasting, an additional fee shall be assessed at the rate of $1.50 per each day on which blasting occurs.

The initial annual fees for mining and blasting activities shall be based upon the applicant's estimate of the amount of material to be mined annually and the number of days on which blasting will be performed during the term of the permit. If the actual amount of material mined or the actual number of days on which blasting was done exceeds the estimate, additional fees shall be assessed in accordance with Schedule III after the permit has expired. Permits issued under this schedule shall be renewed annually. Operators of mining and blasting activities shall submit records or other information to the Control Officer within 30 days after the permit expiration date showing the approximate actual amount of material mined during the year and the number of days on which blasing occurred.

Rule 5. APPLICATIONS FOR PERMITS

A. The Control Officer shall deny an installation permit or an operating permit if the applicant does not show that every such equipment described in Section A of Rule 4, the use of which may cause or contribute to air pollution, or the use of which may eliminate or reduce or control the emission of air pollutants, is so designed, controlled, or equipped with such air pollution control equipment that it may be expected to operate without emitting, or without causing to be emitted, air contaminants in violation of the provisions of the District Ordinance or these Rules and Regulations.

B. A separate permit application shall be filed and a separate fee shall be paid for each permit unit of basic equipment and for each permit unit of air pollution control equipment.

C. Prior to acting on an application for an operating permit or to renewing an operating permit, the Control Officer may require the applicant or permittee to provide and maintain such facilities as are necessary for sampling and testing purposes in order to secure information that will disclose the nature, extent, quantity or degree of air contaminants discharged into the atmosphere from the equipment described in the application or the permit. In the event of such a requirement, the Control Officer shall notify the applicant or permittee in writing of the type and characteristics of such facilities.

D. In acting upon an application for an operating permit, if the Control Officer finds that such equipment described in Section A of Rule 4 has been constructed not in accordance with the installation permit, he shall deny the application for such operating permit, the Control Officer shall not accept any further application for an operating permit for such equipment so constructed until he finds that such equipment has been reconstructed in accordance with the installation permit.

E. In the event of denial of an installation permit or an operating permit, the Control Officer shall notify the applicant in writing of reasons for such denial. Service of this notification may be made in person or by registered or certified mail, and such service may be proved by the written acknowledgment of the person served or affidavit of the person making the service. The Control Officer shall not accept a further application unless the applicant has corrected the reasons for the objections specified by the Control Officer as reasons for such denial.

Rule 6. APPEALS TO HEARING BOARD

Within ten days after notice is given by the Control Officer of denial or revocation of an installation permit or an operating permit, the applicant may petition on the Hearing Board, in writing, for a public hearing, which shall be held within thirty days after receipt of the petition. The Hearing Board, after notice and a public hearing, may sustain, or modify or reverse the action of the Control Officer.

Rule 7. NONTRANSFERABLE: EXPIRATION

A. An installation permit or an operating permit shall not be transferable, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another, or from one person to another.

B. An installation permit shall expire two years from the date of its issuance.

Rule 8. PERMIT REVOCATION

A. A permit may be revoked for any arbitrary or unreasonable denial of access for inspection or testing purposes, or if it is determined by the Control Officer, by technically valid sampling and measurements, the nature, extent, quantity or degree of air contaminants discharged into the atmosphere from any equipment described in the permit is in violation of any law or these Rules and Regulations.

B. In the event of revocation of a permit the Control Officer shall notify the permittee in writing of the reasons therefore and revocation shall become final 10 days after service of notification. Service of this notification may be made in person or by registered or certified mail.

C. Revocation of a permit may be cancelled by the Control Officer in the 10 day period before becoming final when the source owner or operator has corrected the reasons for the permit revocation to the Control Officer.

D. A permit which has been revoked shall be surrendered to the Control Officer when revocation of the permit has become final.

E. When revocation of a permit has become final, the Control Officer shall not accept any application for a permit for the equipment involved until he finds that the applicant has corrected the reasons for the permit revocation.

F. Revocation of an installation or operating permit shall be stated by the permittee's written petition for a hearing, filed in accordance with Rule 6, until final determination by the Hearing Board.

G. When the Control Officer or his deputies revokes any permit because of failure to comply with any of these Rules or Regulations, the Control Officer shall not refund any fees paid for any unused portion of the permit term. If the Control Officer subsequently determines that the source has corrected the conditions that caused the revocation and approves an application for a new operating permit, a new fee shall be assessed in accordance with the appropriate fee schedule.

Rule 9. POSTING OF PERMIT

A. A person who has been granted an installation permit shall display such permit in a suitable conspicuous place at the site, reasonably close to the equipment, and readily accessible to personnel from the District.

B. A person who has been granted an operating permit shall firmly affix such permit, an approved facsimile of such permit, or other approved identification bearing the permit number upon such equipment for which the operating permit is issued in such a manner as to be clearly visible and accessible. In the event that such equipment is so constructed or operated that such permit cannot be so placed, the permit shall be mounted so as to be clearly visible in an accessible place within a reasonable distance of such equipment, or maintained readily available at all times on the operating premises.

Rule 10. NOTICE OF BUILDING PERMIT AGENCIES

A. All agencies of the county or political subdivisions of the county that issue or grant building or land use permits or approvals shall examine the plans and specifications submitted by an applicant for a permit or approval to determine if an air pollution installation permit or land preparation; earth moving; demolition permit will possibly be required under the provisions of these Rules and Regulations. If it appears possible that such installation permit or land preparation; earthmoving; demolition permit will be required, the agency shall give written notice of such applicant to contact the Control Officer and shall furnish a copy of such notice of the Control Officer.

Rule 11. CLASSIFICATION AND REPORTING

A. The Board of Supervisors by these Rules and Regulations shall classify air contaminant sources according to levels and types of emissions and other characteristics which relate to air pollution, and shall require reporting for any such class or classes. Reports may be required as to physical outlets, processes and fuels used, and the nature and duration of emissions and as to such other information as is relevant to air pollution and deemed necessary by the Board.

B. When the Control Officer has reasonable cause to believe that any person is violating any provision of the District Ordinance or any of these Rules and Regulations or any requirement of an operating or conditional permit issued pursuant to the District Ordinance of these Rules and Regulations he may request, in writing, that such person forthwith produce all existing books, records and other documents evidencing tests, inspections, or studies which may reasonably relate to compliance or noncompliance with these Rules and Regulations.

C. The owner, lessee, or operator of a potential air contaminant source shall provide, install, maintain, and operate such air contaminant monitoring devices as are reasonable and required to determine compliance in a manner acceptable to the Control Officer, and shall supply monitoring information as described in writing by the Control Officer. Such devices shall be available for inspection by the Control Officer during all reasonable times.

D. Any records or other information furnished to or obtained by the Board of Supervisors, or the Control Officer, concerning one or more air pollution sources, which records and information relate to production or sales figures or to the processes or production unique to the owner or operator, or which would tend to adversely affect the competitive position of such owner or operator, shall be only for the confidential use of the Board of Supervisors, or the Control Officer, in the administration of the District Ordinance, unless such owner or operator shall expressively agree to their publication or availability to the public. No provision of this rule shall be construed to prohibit the appropriate governmental agency from publishing quantitive and qualitive statistics pertaining to the emission of pollutants.

E. Any person violating the provisions of this rule or knowingly or willfully submitting false information submitting false information reports or records to the Board of Supervisors or the Control Officer is guilty of a misdemeanor punishable as provided in Rule 25.

Rule 12. VIOLATIONS; ORDER OF ABATEMENT; TIME FOR COMPLIANCE

A. When the Control Officer has reasonable cause to believe that any person is violating any provision of the District Ordinance or any of these Rules and Regulations or any requirement of an operating or conditional permit issued pursuant to the District Ordinance or these Rules and Regulations, he may forthwith serve upon such person by registered or certified mail or in person an order of abatement, or may file a complaint alleging violation pursuant to Rule 25 of this Regulation, or both. The order shall state with particularity the act being done that constitutes the violation, shall state in its entirety the certain requirement, provision or Rule or Regulation being violated, and that the alleged violator is entitled to a hearing if such hearing is requested in writing within twenty days after the date of issuance of the order. The order may be conditional and require a person to refrain from the particular acts unless certain conditions are met.

Rule 13. HEARINGS ON ORDERS OF ABATEMENT

A. An order of abatement issued by the Control Officer shall become effective immediately upon the expiration of the time during which a request for a hearing may be made pursuant to Rule 12 unless the person or persons named in such order shall have made a timely request for a hearing before the Hearing Board. If a hearing is requested, the Hearing Board shall hold the hearing within thirty days from receipt of the request unless such time is extended by the Hearing Board. Written notice of the time and place of the Hearing shall be sent by the Hearing Board to the person or persons requesting the hearing and to the Control Officer at least fifteen days before the hearing.

B. If the Board, after the hearing, determines that the act or acts set forth in the order constitute a violation of any provision of the District Ordinance or of these Rules and Regulations or any requirement of an operating or conditional permit issued pursuant to the District Ordinance or these Rules and Regulations and that no conditional permit is justified, the Board shall affirm or modify the order of abatement. The order may be conditional and require a person to refrain from the particular acts or acts unless certain conditions are met.

Rule 14. CONDITIONAL PERMIT; STANDARDS

A. The Hearing Board may grant to any person one conditional permit for each air pollution source which allows such person to vary from certain requirements of these Rules or Regulations if the Hearing Board finds that additional time is needed for compliance and, upon the basis of evidence presented to it, that the conditional permit, if granted, will not unduly endanger human health or safety either directly or indirectly.

Rule 15. PETITION FOR CONDITIONAL PERMIT; PUBLICATION; PUBLIC HEARING

A. A person who seeks a conditional permit shall file a petition with the Hearing Board. Within thirty days after the filing of a petition for conditional permit, the Hearing Board shall set a hearing date. The hearing date shall be within sixty days after the filing of the petition.

B. Notice of the filing of a petition for conditional permit and of the hearing date on said petition shall be published in the manner provided in Rule 21.

C. The hearing on the petition for the conditional permit shall be public.

Rule 16. DECISIONS ON PETITIONS FOR CONDITIONAL PERMIT; TERMS AND CONDITION OF CONDITIONAL PERMITS

A. Within thirty days after the conclusion of the hearing on the petition for a conditional permit, the Hearing Board shall deny the petition or grant the petition on such terms and conditions as it deems appropriate.

B. The terms and conditions which are imposed as a condition to the granting or the continued existence of a conditional permit shall include but not be limited to:

1. A detailed plan, not to exceed one year in duration, for completion of corrective steps needed to conform to the requirements of these Rules and Regulations and the provisions of the District Ordinance.
2. Such written reports as may be required.
3. The right to make periodic inspection of the facilities for which the conditional permit is granted.

C. The fee for a conditional permit shall be twice the amount of the annual operating permit fee for such equipment and shall be deposited in the special Pima County Air Pollution Control District fund.

Rule 17. TERM OF CONDITIONAL PERMIT

A conditional permit, and any extension thereof, shall be valid for such period as the Hearing Board prescribes but in no event for more than one year from the date of initial issuance.

Rule 18. SUSPENSION AND REVOCATION OF CONDITIONAL PERMIT

If the terms and conditions of the conditional permit are being violated, the Control Officer may seek to revoke or suspend the conditional permit granted. In such event, the Control Officer shall serve notice of such violation on the holder of the conditional permit in the manner provided in Rule 21. The notice shall specify the nature of such violation and the date on which a hearing will be held by the Hearing Board to determine if such a violation has occurred and whether the conditional permit should be suspended or revoked. The date of said hearing shall be within thirty days from the date said notice is served upon the holder of the conditional permit.

Rule 19. DECISIONS OF HEARING BOARD; SUBPOENAS; EFFECTIVE DATE

A. All decisions of the Hearing Board, including the majority opinion and all concurring and dissenting opinions, shall be in writing and shall be of public record.

B. A majority of the total membership of the Hearing Board shall concur in a decision for it to have effect.

C. The chairman, or, in his absence, the vice chairman may issue subpoenas to compel attendance of any person at a hearing and require the production of books, records, and other documents material to a hearing. Obedience of subpoenas may be enforced pursuant to A.R.S. Section 12-2212.

D. Subject to the approval of the Board of Supervisors, the Hearing Board may adopt a manual of procedures governing its operation.

E. Decisions of the Hearing Board shall become effective not less than thirty days after they are issued unless:

   1. A rehearing is granted which shall have the effect of stating the decision.

   2. It is determined that an emergency exists which justifies an earlier effective date.

F. The Hearing Board may revoke or modify an order of abatement, a permit or a conditional permit only after first holding a hearing within thirty days from the giving of notice of such hearing as provided in Rule 21.

Rule 20. JUDICIAL REVIEW; GROUNDS; PROCEDURES

A. Judicial review of Hearing Board decisions shall be pursuant to the provisions of Arizona Revised Statutes, Title 12, Chapter 7, Article 6, except as provided in this rule.

B. Within thirty days after service of notice of a final decision or order of the board, or an order denying a rehearing timely applied for, any person who was a party of record in the proceedings before the board, including the Control Officer or department authorized or designated to enforce air pollution regulations, may appeal therefrom to the Superior Court in the County in which the hearing was conducted and the scope of such review shall be determined pursuant to A.R.S. Section 12-910.

C. A notice of appeal, designating the grounds therefore, and a demand in writing for a certified transcript of the testimony and exhibits shall be filed with the court and served on the board. After receipt of the demand, accompanied by payment of a fee of the current prevailing rate for transcript, and one dollar for certification thereof, the board shall make and certify the transcript and file it with the Clerk of the Court to which the appeal has been taken within thirty days, unless extended by agreement of the parties or order of the court.

D. When an appeal is taken from an order or decision of the board, such order or decision shall remain in effect pending final determination of the matter, unless stayed by the court, on a hearing after notice to the board and upon a finding by the court, that there is probably cause for appeal and that great or irreparable damage may result to the petitioner warranting such stay.

E. An appeal may be taken to the Court of Appeals from the order of the Superior Court as in other civil cases. Proceedings under this section shall be given precedence and brought to trial ahead of other litigation concerning private interests and other matters that do not affect public health and welfare.

Rule 21. NOTICE OF HEARING; PUBLICATION; SERVICE

A. Any notice of hearing required by the District Ordinance or these Rules or Regulations shall be given by publication of a notice of hearing for at least two times in a newspaper of general circulation published in Pima County and by posting copies of the petition and notice in at least three conspicuous places in the county.

B. If the hearing involves any violation of these Rules and Regulations or a conditional permit therefrom then, in addition to the requirements of Section A of this rule, the Control Officer shall be notified and the person allegedly committing or having committed the violation or requesting the conditional permit shall be served personally or by registered or certified mail at least fifteen days prior to the hearing with a written notice of hearing.

152

Rule 22. HEARING BOARD FEES

A. Every petitioner for a hearing for any purpose before the Hearing Board, except a state or local governmental agency or public district, shall pay to the secretary of the Hearing Board, on filing, a fee in the sum of $35.00.

B. Any person, except the Control Officer, requesting a transcript of the hearing shall pay the cost of such transcript.

Rule 23. INJUNCTION RELIEF

Upon the failure or refusal of a person to comply with an order of abatement by the Hearing Board or the Control Officer in cases where an order for abatement has become effective, the Control Officer may file an action in the Superior Court of the county to restrain and enjoin the person engaging in further acts violating the order of abatement. The court shall proceed as in other actions for injunctions. In the preliminary hearing in an action for an injunction or restraining order brought pursuant to the District Ordinance, any findings of the Hearing Board shall be prima facie evidence of the fact or facts found therein until rebutted.

Rule 24. PRECEDENCE OF ACTIONS

For the benefit of the people of the state, court actions and proceedings brought under the District Ordinance or these Rules and Regulations shall be given precedence and brought to trial ahead of other litigation concerning private interests and other matters that do not affect public health and welfare.

Rule 25 MISDEMEANOR; PENALTY

Any person who violates any provision of the District Ordinance or these Rules and Regulations or any effective order of abatement issued pursuant to the District Ordinance or these Rules and Regulations is guilty of a misdemeanor punishable by imposition of a fine of not less than fifty dollars or more than three hundred dollars per day for each day the violation continues. Each day of violation shall constitute a separate offense. Peace officers and the Control Officer and his deputies shall have the authority to issue a notice to appear under the same conditions and procedures set forth in A.R.S. Section 13-1422 for a violation of any provision of the District Ordinance or these Rules and Regulations or any effective order of abatement issued pursuant to the District Ordinance or these Rules and Regulations.

Rule 26. DEFENSES

Violations under Rule 25 shall be Malum Prohibitum. Lack of criminal intent shall not constitute a defense to such violations.

Rule 27. PRESERVATION OF RIGHTS

It is the purpose of the District Ordinance to provide additional and cumulative remedies to prevent, abate, and control air pollution in the county. Nothing contained in the District Ordinance shall be construed to abridge or alter rights of action or remedies in equity under the common law or statutory law, criminal or civil, nor shall any provisions of the District Ordinance, or any act done by virtue thereof, be construed as stopping the State or any municipality, or owners of land from the exercise of their rights in equity or under the common law or statutory law to suppress nuisance or to abate pollution.

stopping

Rule 28. FILING FEES

A. When an applicant files an application for an installation permit a filing fee of $10.00 shall be paid on application submittal and the Control Officer shall not act on such application until the filing fee is paid.

B. The filing fee shall be applied to the installation permit fee on permit issuance. No refund will be made in the event no installation permit is issued.

Rule 29. PERMIT FEES

A. Every applicant for an equipment installation permit or an equipment operative permit for any equipment for which a permit is required under Rule 4 shall pay a permit fee in the amount prescribed in the following schedules. If a valid activity operating permit has been issued by the Control Officer for the activity in accordance with Regulation I, Rule 4J, equipment operating permits are not required.

B. Before a permit is issued a statement of the fee to be paid therefore shall be mailed to the applicant. If the fee is not received within 30 days after the statement is mailed, the application shall be deemed withdrawn and cancelled and the Control Officer shall so notify the applicant by mail.

C. Where an application is filed for a new installation permit exclusively involving the transfer of location of stationary equipment previously covered by an operating permit granted under Rule 4, the applicant shall pay an installation permit fee of only $10. A new operating permit granted for operation at the new location shall be subject to the provisions of Section D of Rule 4.

D. Where an application is filed for a new installation permit exclusively involving major alterations resulting in a change to any equipment, then covered by an operating permit under the provisions of Rule 4, the applicant shall pay an installation permit fee of only $10. Where a new operating permit is granted because of these alterations to equipment, the initial operating permit fee shall be $10 and the annual renewal fee shall be calculated on the basis of the new ratings and shall continue to be due and payable on the anniversary date of the original permit.

E. Where an application is filed for a new operating permit exclusively involving a change in owner or operator and the permit is granted, the permit shall be subject to the provisions of Section D of Rule 4.

F. In the event that more than one fee schedule is applicable to a permit, the governing schedule shall be that which results in the higher fee.

G. A request for a duplicate permit shall be made in writing to the Control Officer within 10 days after the destruction, loss or defacement of a permit. It should contain the reason for which a duplicate permit is being requested. A fee of $5 shall be charged for issuing a duplicate permit.

H. (REPEALED) (December 1974)

I. Fees paid in excess of the amount required or fees paid by mistake may be refunded on proper claim filed within one year after payment. Changes in fee schedules shall not be retroactive.

J. The annual renewal fee for an operating permit under Rule 4 shall be the prescribed operating permit fee under current fee schedules. If the renewal fee is not paid by the anniversary date of the permit, the permit shall be automatically revoked and the Control Officer shall so notify the permittee by registered or certified mail.

K. Where authority has been delegated to the district the State Bureau of Air Pollution Control for jurisdiction and control of specific types of portable or mobile air pollution source equipment, an operating permit shall be required. An operating permit may be issued to operate portable equipment under district jurisdiction at more than one location in the county but the Control Officer shall be notified in writing of each change of location of the equipment for the permit to remain valid. The permit will automatically be revoked for failure to so notify the Control Officer. Owners or operators of mobile equipment under district jurisdiction shall be required to obtain operating permits for the equipment but shall not be required to notify the Control Officer of change of location. Permit fees as established by the fee schedules of Rule 30 of this regulation shall be paid for permits for portable and mobile equipment under district jurisdiction.

L. With respect to the fee schedules contained in Rule 30 of this regulation only, the maximum installation permit fee for all permit units for stationary and mobile and portable equipment of any one owner or company at an individual contiguous plant site shall not exceed a fee of $1,000 and the maximum operating permit fee for that equipment shall not exceed a yearly fee of $1,000.

M. A permit fee of $8 shall be assessed for a Temporary Burning Permit. Agricultural burning permits issued pursuant to Regulation II, Rule 8A shall be issued for burning to be conducted on specific dates during a given 30-day period. Fees shall be assessed for the 30-day permit in the amount of $11 plus $1.50 per each day on which agricultural burning is to be performed.

N. With respect to the fee schedule contained in Rule 4E of this regulation only, the maximum fee for the combined total of earthmoving, land preparation, demolition, trenching, blasting and charge hole drilling, and road construction for any one owner or company at an individual contiguous activity site shall not exceed a yearly fee of $1,000.

O. With respect to the fee schedules contained in Rule 4J of this regulation only, the maximum fee for the combined total of racing event, minimg activities (including related blasting), and unpaved parking lot operations for any one owner or company at an individual contiguous operation site shall not exceed a yearly fee of $1,000.

FEE SCHEDULES see p 51

Rule 30. EQUIPMENT FEE SCHEDULES

Any equipment for which an installation permit or an operating permit is required under Rule 4 shall be assessed a permit fee per permit unit of equipment in accordance with the following schedules:

17

SCHEDULE I

INCINERATOR AND SCRAP METAL SWEATERS

Based on the maximum horizontal inside cross sectional area in feet, of the primary combustion chamber

Area in Square Feet	Permit Fee $ Installation	Permit Fee $ Operating
Up to and including 3	15	10
Greater than 3 but less than 6	25	15
6 or greater but less than 9	50	40
9 or greater but less than 27	100	75
27 or greater but less than 50	150	115
50 or greater but less than 75	200	150
75 or greater but less than 100	250	190
Greater than 100	300	225

SCHEDULE 2

STORAGE EQUIPMENT

Stationary tanks, reservoirs, or other containers

Gallons	Permit Fee $ Installation	Permit Fee $ Operating
Greater than 250 but less than 15,000	20	15
15,000 or greater but less than 40,000	40	30
40,000 or greater but less than 400,000	70	55
400,000 or greater but less than 4,000,000	100	75
4,000,000 or greater	150	115

SCHEDULE 3

FUEL BURNING EQUIPMENT (Except equipment covered by Schedule 4)

Based on designed fuel comsumption using gross input heating values per permit

BTU per Hour	Permit Fee $ Installation	Permit Fee $ Operating
500,000 * or greater but less than 1,500,000	50	40
1,500,000 or greater but less than 5,000,000	70	55
5,000,000 or greater but less than 15,000,000	150	115
15,000,000 or greater but less than 50,000,000	200	150
50,000,000 or greater	270	205

* Includes equipment items rated at less than 500,000 BTU each which aggregate with other such equipment of the applicant at the same location or property, other than a one or two-family residence, more than 500,000 BTU gross input.

SCHEDULE 4

NATURAL GAS-LPG FUEL BURNING EQUIPMENT

BTU per Hour	Permit Fee $ Installation	Permit Fee $ Operating
500,000* or greater but less than 1,000,000	20	15
1,000,000 or greater but less than 5,000,000	40	30
5,000,000 or greater	100	75

* Includes equipment items rated at less than 500,000 BTU each which aggregate with other such equipment of the applicant at the same location or property, other than a one or two-family residence, more than 500,000 BTU gross input.

SCHEDULE 5

MOTOR ENGINES

Based on total rated horsepower or equivalent of all electric, gasoline, diesel, natural gas and LPG motors and engines included in permit unit.

¶ missing)
see p.52

Horsepower	Permit Fee $ Installation	Permit Fee $ Operating
Up to and including 5	15	10
Greater than 5 but less than 15	25	20
15 or greater but less than 30	50	40
30 or greater but less than 45	70	55
45 or greater but less than 65	100	75
65 or greater but less than 125	150	115
125 or greater but less than 200	200	150
200 or greater	270	205

SCHEDULE 6

ELECTRIC ENERGY EQUIPMENT (Except electric motors)

Based on total kilovolt ampere (KVA) ratings per permit unit

Kilovolt Amperes (KVA)	Permit Fee $ Installation	Permit Fee $ Operating
Up to and including 45	15	10
Greater than 45 but less than 145	25	20
145 or greater but less than 450	50	40
450 or greater but less than 1,450	70	55
1,450 or greater but less than 2,500	100	75
2,500 or greater but less than 4,500	150	115
4,500 or greater but less than 14,500	200	150
14,500 or greater	270	205

SCHEDULE 7

PAINT SPRAYING EQUIPMENT

	Permit Fee $	
	Installation	Operating
Paint Spraying-Operations (per permit unit or spray booth)	15	10

SCHEDULE 8

ASPHALT KETTLES AND ASPHALT TANKERS

Permits are required under this fee schedule for asphalt kettles and tankers used in roofing operations or any other operation using asphalt which might cause or contribute to air pollution, or which might cause emissions of odorous matter. No permit shall be required for asphalt tankers which are used exclusively for the transportation of asphalt and are not used for the application of asphalt to roofs, roads, or other surfaces.

	Permit Fee $	
Total Capacity in Gallons	Installation	Operating
Less than 500	25	20
Greater than 500 but less than 1,000	50	40
Greater than 1,000 but less than 1,500	80	60
Greater than 1,500	100	75

SCHEDULE 9

MISCELLANEOUS

Any equipment which is not included in the preceding schedules and which requires a permit under Rule 4 of this regulation shall be assessed an installation permit fee of $40 and an operating permit fee of $25:

Rule 31. EMISSIONS TEST FEE

A. Whenever the Control Officer has reason to believe that stack sampling of the emission from any source is necessary to determine the extent and amount of pollutants being discharged into the atmosphere, he may have the stack emission sampled and analyzed by qualified personnel; or the person causing the emission, at his option with the approval of the Control Officer, may have the emission sampled and analyzed by approved personnel and submit a complete report of the sampling data and analyses within 15 days of the approved time period for sampling. The time required for collecting sampled, making the analyses and preparing the necessary reports shall be charged against the owner or operator of the source in a reasonable sum to be determined by the Control Officer, which said sum is not to exceed the actual cost to the district of such work. The owner or operator shall pay the sum charged within 30 days of the invoicing of the charge.

Rule 32. TESTING AND SAMPLING FACILITIES

A. Notwithstanding any air contaminant monitoring devices that may be required by the Control Officer under Section C of Rule 11 it shall be the responsibility of the owner or operator of an air contaminant emissions source to, and he shall, provide at his expense necessary and conveniently located utilities, reasonable and necessary test openings in the system, stack, or stack extension if necessary for uniformity of gas flow, and safe access thereto to permit technically valid samples and measurements of the emissions to be taken by the Control Officer at reasonable times and under reasonable conditions.

B. In the event the existing facilities for sampling or testing and the access thereto are inadequate to permit the taking or technically valid samples and measurements, the Control Officer shall notify the source owner or operator, in writing, of the required size, number, and location of sampling holes; required stack extension where necessary; required size and location of the sampling platform; required access to the sampling platform; required utilities for operating the sampling and testing equipment; and the required schedule for the furnishing of these requirements. The source owner or operator shall furnish such facilities as required in accordance with the schedule outlined by the Control Officer.

REGULATION II EMISSIONS PROHIBITED

Rule 1. VISIBLE EMISSIONS

A. No person shall cause or permit the discharge into the atmosphere from any single source of emission air contaminants which are:

  1. of a shade equal to or darker than No. 2 on the Ringelmann Chart, or,

  2. of a density equal to or greater than 40 percent opacity.

B. Exceptions

  1. A person may cause or permit the discharge into the atmosphere from any single source of emission, except incinerators and diesel engines, for a period or periods aggregating not more than three minutes in any sixty minutes air contaminants which are:

     a. of a shade not darker than No. 3 of the Ringelmann Chart, or

     b. of a density not greater than 60 percent opacity

  2. A person may cause or permit the discharge into the atmosphere of air contaminants of a shade not darker than No. 3 on the Ringelmann Chart from:

     a. a diesel engine being accelerated under load for a maximum of ten consecutive seconds, or

     b. a cold diesel engine being started up with equipment at standstill for a start up period not to exceed ten minutes.

  3. Where the presence of uncombined water is the only reason for failure of an emission to meet the requirements of this rule, this rule shall not apply.

C. No person shall cause or permit the discharge into the atmosphere from any incinerator for more than thirty seconds in any sixty minutes smoke which is of a shade or density equal to or darker than No. 1 on the Ringelmann Chart or 20 percent opacity, and no person shall cause or permit the operation of any incinerator from sunset to sunrise.

D. No person shall cause or permit the discharge of visible emissions, including fugitive dust, beyond the lot line of property on which the emissions originate.

Rule 2. EMISSIONS OF PARTICULATE MATTER

A. No person shall cause or permit to be emitted into the outdoor atmosphere from any incinerator particulate matter to exceed 0.1 grains per cubic foot of flue gas at standard conditions adjusted to 12 percent carbon dioxide in the exhaust gases and calculated as if no auxiliary fuel had been used.

B. 1. No owner or operator of any stationary process source shall discharge or cause the discharge of particulate matter into the atmosphere in excess of the hourly rate shown in Table I for the process weight rate identified for such source:

Table I

Process Weight Rate (pounds per hour)	Emission Rate (pounds per hour)
50	0.36
100	0.55
500	1.53
1,000	2.25
5,000	6.34
10,000	9.73
20,000	14.99
60,000	29.60
80,000	31.19
120,000	33.28
160,000	34.85
200,000	36.11
400,000	40.35
1,000,000	46.72

Interpolation of the data in the table for process weight rates up to 60,000 lbs/hr shall be accomplished by use of the equation:

$$E = 3.59\,P^{0.62} \qquad P \leq 30 \text{ tons/hr}$$

and interpolation and extrapolation of the data for process weight rates in excess of 60,000 lbs/hr shall be accomplished by use of the equation:

$$E = \underline{17.31\ P^{0.36}} \qquad \underline{P\quad 30\ \text{tons/hr}}$$

Where

E = Emissions in pounds per hour
P = Process weight in tons per hour

2. Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpolation of this regulation (Rule 2B), the interpretation that results in the minimum value for allowable emission shall apply.

3. For purposes of this regulation (Rule 2 B), the total process weight from all similar process units at a plant or premises shall be used for determining the maximum allowable emission of particulate matter.

4. Rule 2B-1 of this regulation shall not apply to incinerators, fuel-burning installations, or Portland Cement Plants having a process weight rate in excess of 250,000 lbs/hr.

5. Standard for particulate matter for Portland Cement Plants:

   a. No owner or operator of a Portland Cement Plant with a process weight rate in excess of 250,000 lbs/hr shall discharge or cause the discharge of particulate matter into the atmosphere from the kiln which is:

      1. In excess of 0.30 lb per ton of feed to the kiln (015 Kg. per metric tons), maximum 2-hour average.

      2. Greater than 10 percent opacity, except that where the presence of uncombined water is the only reason for failure to meet the requirements for this subparagraph, such failure shall not be a violation of this section.

   b. No owner or operator subject to the provisions of this rule (Rule 2B-5) shall discharge or cause the discharge into the atmosphere of particulate matter from the clinker cooler which is:

      1. In excess of 0.10 lb per ton of feed to the kiln (0.050 Kg. per metric ton), maximum 2-hour average.

      2. 10 percent opacity or greater.

   c. No owner or operator subject to the provisions of this rule (Rule 2B-5) shall discharge or cause the discharge into the atmosphere of particulate matter from any affected facility other than the kiln or clinker cooler which is 10 percent opacity or greater.

6. The test measures and procedures used to determine compliance with this rule will be in accordance with the procedure specified by the EPA in the Federal Register, May 14, 1973, 39 FR 12704, Section 52.126. Equivalent methods and procedures may be used if approved by the Control Officer.

C. No person shall cause or permit any material to be handled, used, transported or stored, in process, construction, or otherwise, in a manner which allows or may allow particulate matter to become airborne without minimizing such emissions by good modern practices, such as enclosing or hooding with necessary dust collecting equipment, covering (as for stockpiles or loads in open bodied trucks), using an approved dust suppressant, or other acceptable means.

D. No person shall cause or permit sandblasting or other abrasive blasting operations without minimizing dust emissions to the atmosphere by good modern practices, such as wet blasting, the use of effective enclosures with necessary dust collecting equipment or other acceptable means.

E. No person shall cause or permit a building or its appurtenances, or a building or subdivision site, or a driveway or road, or a parking area, or a vacant lot or sales lot, or an urban or suburban open area to be constructed, used, altered, repaired, demolished, cleared, or leveled, or the earth to be moved or excavated, without taking precautions to limit particulate matter from becoming airborne. Dust and other types of air contaminants shall be kept to a minimum by good modern practices such as using an approved dust suppressant or adhesive soil stabilizer, paving, detouring, barring access, or other acceptable means.

F. No person shall cause or permit a vacant lot, or an urban or suburban open area, to be driven over or used by motor vehicles, trucks, cars, cycles, bikes, or buggies, or by animals (as horses) without taking precautions to limit dust from becoming airborne. Dust shall be kept to a minimum by using an approved dust suppressant or adhesive soil stabilizer, or by paving, or by barring access to the property, or by other acceptable means.

G. Particulate Emissions From Fuel Burning Equipment

1. This regulation applies to any installation in which fuel is burned for the primary purpose of producing steam, hot water, hot air or other liquids, gases or solids and in the course of doing so the products of combustion do not come into direct contact with process materials. When any products or byproducts of a manufacturing process are burned for the same

purpose or in conjunction with any fuel, the same maximum emission limitations shall apply.

2. The heat content of solid fuel shall generally be determined according to ASTM Method D-271, "Laboratory Sampling and Analysis of Coal or Coke," and ASTM Method D-2015, "Gross Caloric Value of Solid Fuel by Adiabatic Bomb Calorimeter." These methods shall be used as guides, but may be modified by the Control Officer to suit specific sampling conditions or needs based upon good practice.

3. For purposes of this regulation, the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet. The heat input value used shall be the equipment manufacturer's or designer's guaranteed maximum input, whichever is greater. The total heat input of all fuel-burning units on a plant or premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted.

4. No person shall cause, allow or permit the emission of particulate matter, caused by combustion of fuel, from any fuel-burning operation in excess of the amounts calculated by the equations presented below:

   a. For equipment having a heat input of 4200 million BTU per hour or less, the maximum allowable emissions shall be determined by the following equation:

   $$E = 1.02Q^{0.769}$$

   Where E = the maximum allowable particulate emissions rate in pounds-mass per hour.

   Q = the heat input in million BTU per hour.

   b. For equipment having a heat input rate greater than 4200 million BTU per hour, the maximum allowable emissions shall be determined by the following equation:

   $$E = 17.0Q^{0.432}$$

   Where "E" and "Q" have the same meanings as in subparagraph a above.

   c. For reference purposes only, the two equations in paragraph 4 are plotted in Figure 1. The emission values obtained from the graph are approximately correct for the heat input rates shown. However, the actual values shall be calculated from the applicable equations and rounded off to two decimal places.

Rule 3. EMISSIONS OF GASES, VAPORS, FUMES, OR ODORS

A. No person shall cause or permit any emissions of gases, vapors, or fumes into the atmosphere in such manner or quantities as to result or tend to result in air pollution without minimizing such emissions by good modern practices.

B. No person shall cause or permit any emission of odorous matter in such manner or quantity as to be readily detectable as malodorous at any point along or beyond property lines

1. adjacent to residential, recreational, institutional, educational, retail sales, hotel, or business premises; or

2. adjacent to premises other than those in Subsection 1 above, when one volume of air containing such odorous matter is diluted with 20 or more volumes of odor free air;

3. except that the odor of live trees, shrubs, plants or flowers, and the odors incidental to domestic gardening shall not be considered malodorous within the meaning of this rule.

C. No person shall cause or permit solvents or other volatile compounds or materials such as, but not limited to, paints, acids, alkalies, pesticides, fertilizer, or manure to be processed, stored, used, or transported in such a manner or by such means that they will unreasonably evaporate, leak, escape, or be otherwise discharged into the ambient air so as to cause or contribute to air pollution; and where means are available to reduce effectively the contribution of the above to air pollution from evaporation, leakage, or discharge as determined by the Control Officer, such control methods, devices or equipment shall be installed and used.

Rule 4. STORAGE AND HANDLING OF PETROLEUM PRODUCTS

A. A person shall not place, store, or hold in any stationary tank, reservoir or other container of more than 40,000 gallons capacity any gasoline or other petroleum distillate having a vapor pressure of 1.5 pounds per square inch absolute or greater under actual storage conditions, unless such tank, reservoir or other container is a pressure tank maintaining working pressures sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere, or is equipped with a floating roof or a vapor recovery system or other emission control device.

B. No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more unless such tank is equipped with either submerged filling inlets or with vapor recovery or emission control systems such that loss of vapor to the atmosphere during filling operations shall be mini-

included

mized. The provisions of this Section B shall not apply to the loading of gasoline into any tank having a capacity of less than 2,000 gallons which was installed prior to 1969 nor to any underground tank installed prior to 1969 where the fill line between the fill connection and the tank is offset.

C. No person shall load or permit the loading of gasoline into any tank, truck, or trailer from any loading facility handling 20,000 gallons per day or more unless such loading facility is equipped with submersible filling arms or other emission control systems.

D. For the purpose of this rule, any petroleum distillate having a reid vapor pressure of four pounds or greater shall be included by the term "gasoline". ✓

Rule 5. ORGANIC SOLVENTS

A. No person shall cause or permit the discharge of more than 3 pounds per hour or 15 pounds per day of organic material from any equipment, including but not limited to surface coating, printing, degreasing or dry cleaning equipment, or other contrivance used for employing or applying any organic solvent other than those accepted by the Control Officer as being photochemically nonreactive without reducing such emissions by at least 85 percent through carbon adsorption, incineration oxidizing to carbon dioxide more than 90 percent of the organic compound, or other acceptable means. ✓ adsorption

B. For the purposes of this rule, organic solvents include diluents and thinners and are defined as organic materials which are liquid at standard conditions and which are used as dissolvers, viscosity reducers, or cleaning agents.

Rule 6. OPERATION OF ASPHALT KETTLES

A. No person shall cause or permit the operation of an asphalt kettle without minimizing air contaminant emissions by good modern practices including the control of temperature below the asphalt flash point and below the maximum temperature recommended by the asphalt manufacturer, the operation of the kettle with lid closed except when charging, the pumping of asphalt from the kettle or the drawing of asphalt through cocks with no dipping, the maintaining of the kettle in clean, properly adjusted, and good operating condition, and the firing of the kettle with liquid petroleum gas or other fuel acceptable to the Control Officer.

Rule 7. EMISSIONS OF CERTAIN SULFUR COMPOUNDS

✓ (51.7)

A. Emission Limitation, Fuel Burning Equipment - Sulfur Dioxide

1. This regulation applies to an installation operated for the purpose of producing electric energy with a resulting discharge of sulfur dioxide in the installation's effluent gases.

2. Steam power generating installations which are new sources shall not emit more than 0.80 pounds of sulfur dioxide, maximum two-hour average, per million BTU heat input when coal is fired. Steam power generating installations which are existing sources shall not emit more than 1.0 pounds of sulfur dioxide, maximum two-hour average, per million BTU heat input when coal is fired.

B. Emission Limitation, Fuel Burning Equipment - Nitrogen Oxides

1. This regulation applies to an installation operated for the purpose of producing electric energy with a resulting discharge of nitrogen oxides in the installation effluent gases.

2. Steam power generating installations which are new sources shall not emit more than 0.20 pounds of nitrogen oxides, maximum two-hour average, calculated as nitrogen dioxide, per million BTU heat input when gaseous fossil fuel is fired.

3. Steam power generating installations which are new sources shall not emit more than 0.30 pounds of nitrogen oxides, maximum two-hour average, calculated as nitrogen dioxide, per million BTU heat input when liquid fossil fuel is fired.

4. Steam power generating installations which are new sources shall not emit more than 0.70 pounds of nitrogen oxides, maximum two-hour average, calculated as nitrogen dioxide, per million BTU heat input when solid fossil fuel is fired.

Rule 8. OPEN BURNING

A. It shall be unlawful for any person to ignite, cause to be ignited, permit to be ignited, or suffer, allow or maintain any open outdoor fire within Pima County except as provided in the following subsections of this rule:

1. Open outdoor fires used only for domestic cooking of food, or for providing warmth for human beings, or for recreational purposes, or for the branding of animals, or for the training of organized fire fighters, will be permitted without open burning permit (City permit may be required by City Ordinance) provided they do not create a public nuisance.

2. The following open outdoor fires may be permitted by the Control Officer under written burning permit on forms provided by the Control Officer, who shall determine the conditions and times for burning:

169

a. Open outdoor fires declared as necessary in writing to the Control Officer by:

   1. Any public official in the performance of official duty for the purpose of weed abatement or the prevention of a fire hazard or for the disposal of dangerous materials where there is no safe alternate method of disposal.

   2. The Federal government or any of its departments, agencies, or agents; the State or any of its agencies, departments or political subdivisions for the purpose of watershed rehabilitation or control through vegetation manipulation.

   3. The State entomologist or the agricultural extension agent of Pima County for the sole purpose of pest and disease prevention found necessary by actual agency investigation.

b. Open outdoor fires for the burning of agricultural ditch banks, fence rows, and canal laterals, with high temperature mechanical burners, where no reasonable alternate method of removal is available.

c. Open outdoor fires in nurseries, or citrus groves having factory fabricated heaters so controlled that under field conditions they will not produce unconsumed solid carbonaceous matter at a rate in excess of 1 gram per minute per unit.

d. Open outdoor fires for the burning of ordinary household trash in nonurban areas of low population density, as determined by the Control Officer, where no refuse collection service is available. An area of low population density is considered to be an area with a density of less than 100 well spread out dwelling units per square mile and where the nearest dwelling unit to the permit applicant is at least one eighth mile distant.

e. Open outdoor fires for the burning of tumbleweeds only where there is no reasonable alternate method of disposal.

f. Open outdoor fires for the purpose of land clearance for construction or agricultural uses in remote nonurban areas at least one half mile from the nearest residence where there is no reasonable alternate method of disposal. Permits for this purpose will be issued only for the burning under meteorological conditions determined by the Control Officer of trees, bushes, and brush piles as required by the Control Officer.

g. Open outdoor fires as torches or flares for the purpose of emergency safety measures.

h. Open outdoor fires permitted by any conditional permit issued by a hearing board established under the District Ordinance.

i. Nothing in this rule is intended to permit any practice which is in violation of any statute, ordinance, or rule or regulation.

3. The Control Officer, in the exercise of his discretion may waive the written open burning permit requirement as set forth in Subsection 2 above.

4. Any violation of this rule shall be a misdemeanor punishable as provided in Rule 25 of Regulation I.

Rule 9. MALFUNCTION OF EQUIPMENT

Emissions exceeding any of the limits established in this regulation as a direct result of malfunction or breakdown of any incinerator or any process, fuel-burning, or control equipment or related operating equipment beyond the control of the person owning or operating such equipment may not be deemed to be in violation of these Rules and Regulations provided that the person responsible for such emission had been making a diligent maintenance effort to prevent malfunction or breakdown, and provided further that such person advises the District immediately of the circumstances, and submits to the Control Officer in writing within 24 hours an acceptable plan and schedule for correcting such malfunction or breakdown, and diligently pursues all reasonable means for accomplishing such corrective and preventive action.

Rule 10. CIRCUMVENTION

Nothing in this regulation authorizes or is intended to authorize any practice or combination of practices intended or designed to evade or circumvent the basic requirements of this regulation. Any intent, design, or act to evade or circumvent the requirements of this regulation shall be a violation of these Rules and Regulations.

Rule 11. EXCEPTIONS

A. The provisions of these Rules and Regulations shall not apply to those air pollution sources over which the Air Pollution Control Division of the State of Arizona shall have original jurisdiction and control and over which the director of the division shall have asserted jurisdiction and control at the state level pursuant to Section 36-1706, Arizona Revised Statutes, except when the director of the division has delegated authority for jurisdiction and control of an air pollution source to the district.

REGULATION III EMERGENCIES

Rule 1. EMERGENCIES

A. Notwithstanding the provisions of these Rules and Regulations or any other provision of law, if the Control Officer finds that any person is causing or contributing to air pollution and that such pollution creates an emergency which requires immediate action to protect the public health or safety, he shall order such person to reduce or discontinue immediately the air pollution and such order shall be complied with immediately. Upon issuance of any such order, the Hearing Board shall be notified and shall fix a time and place for a hearing before the Hearing Board, such hearing to be held within a reasonable time thereafter. No more than 24 hours after the conclusion of such hearing, and without adjournment thereof, the order shall be affirmed, modified or set aside. If at any time prior to the hearing, remedial action has been taken so that public health or safety shall not again be endangered, then the Control Officer shall advise the Hearing Board and the Hearing shall be cancelled.

REGULATION IV EFFECTIVE DATE

Rule 1. EFFECTIVE DATE FOR RULES AND REGULATIONS

These Rules and Regulations shall become effective immediately upon their adoption.

REGULATION V SEVERABILITY CLAUSE

Should any rule, section, paragraph, sentence, clause or phrase of these Rules and Regulations be declared unconstitutional or invalid for any reason, the remainder of said Rules and Regulations shall not be affected thereby.

REGULATION VI AMBIENT AIR QUALITY STANDARDS

Notwithstanding the emissions limitations contained in these regulations, no person shall plan, construct, install, erect, or operate any air polluting equipment or facilities which discharge or have the potential for discharging air contaminants in such a way that the concentrations of emissions will prevent the attainment or interfere with the maintenance of the following ambient air quality standards:

A. Non-Specific Particulate

1. Maximum annual geometric mean --limit of 60 micrograms per cubic meter.

2. Maximum 24-hour arithmetic average --limit of 150 micrograms per cubic meter.

B. Sulfur Dioxide

1. Maximum annual average --limit of 50 micrograms per cubic meter.

2. Maximum 24-hour --limit of 260 micrograms per cubic meter.

3. Maximum 2-hour average --limit of 1,300 micrograms per cubic meter.

C. Non-Methane Hydrocarbons

Three hour average (6 to 9 AM)-- limit of 160 micrograms per cubic meter.

D. Photochemical Oxidants

One hour average --limit of 160 micrograms per cubic meter.

E. Carbon Monoxide

1. One hour average --limit of 40 milligrams per cubic meter.

2. Eight hour average --limit of 10 milligrams per cubic meter.

F. Nitrogen Dioxide

Maximum annual average --limit of 100 micrograms per cubic meter.

G. Standards for periods of less than or equal to 24 hours may not be exceeded more than once in any consecutive 12 month period.

H. Evaluation

The evaluation of air quality in terms of procedure methodology and concept is to be consistent with the officially adopted regulations of the U.S. Environmental Protection Agency as published in the Federal Register or Code of Federal Regulations.

REGULATION VII STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

A. The Provisions of Part 60, Chapter 1, Title 40, Code of Federal Regulations, as amended, are hereby adopted by reference and made a part hereof as set forth in Appendix A attached hereto. The regulation shall be known as Regulation VII of the Rules and Regulations of the Pima County Air Pollution Control District. Any amendments to this part that are promulgated by the U.S. Environmental Protection Agency after the effective date of this rule shall be subject to review and adoption by the Pima County Board of Supervisors prior to becoming part of this rule. For the purposes of this rule, the word "Administrator" as used in Part 60, Chapter 1, Title 40, Code of Federal Regulations shall mean the Control Officer of the Pima County Air Pollution Control District.
Section 60.4 is hereby changed to read:

All applications, requests, submissions, reports under this part shall be submitted in triplicate and addressed to the Air Pollution Control Officer; Pima County Health Department, 151 West Congress, Tuscon, Arizona, 85701; the Control Officer shall forward a copy of each to the Regional Administrator, U.S. Environmental Protection Agency, Region IX, 100 California Street, San Francisco, California, 94111.

B. Any violation of the provision of the Rules and Regulations described in Rule A above shall be considered a violation of the Rules and Regulations of the Pima County Air Pollution Control District.

C. Any owner or operator of planned new air polluting equipment or facilities which require reviews by the Control Officer under this regulation shall submit an application for an Installation Permit as described in Regulation I, Rules 4 and 5 of these regulations. In addition to the services normally required for the Installation Permit, the Control Officer shall conduct any necessary special studies, evaluations, and appraisals required by the applicable Federal Regulations herein adopted by reference. The Control Officer shall not issue the Installation Permit until the review process, which includes the special studies, evaluations, and appraisals, has been completed and the provisions of the applicable adopted regulations have been met.

D. In addition to the fee for the Installation Permits as described in Regulation I, Rules 4, 5, 29, and 30 of these regulations, the owner or operator shall pay an additional reasonable fee for the special studies, evaluations, and appraisals required by the applicable adopted regulations; such additional fee shall not exceed the equivalent cost of the Installation Permit as described in Rules 29 and 30, or the actual cost of services provided by the Control Officer, whichever is smaller. Upon request by the owner

175

or operator of the applicant of an Installation Permit required by this regulation, the Control Officer shall furnish to the owner or operator an itemized list of actual costs upon which the additional fee was based.

REGULATION VIII EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS

A. The Provisions of Part 61, Chapter 1, Title 40, Code of Federal Regulations, as amended, are hereby adopted by reference and made a part hereof as set forth in appendix B attached hereto. The regulation shall be known as Regulation VIII of the Rules and Regulations of the Pima County Air Pollution Control District. Any amendments to this part that are promulgated by the U.S. Environmental Protection Agency after the effective date of this rule shall be subject to review and adoption by the Pima County Board of Supervisors prior to becoming a part of this rule. For the purposes of this rule the word "Administrator" as used in Part 61, Chapter 1, Title 40, Code of Federal Regulations shall mean the Control Officer of the Pima County Air Quality Control District.
Section 61.4 is hereby changed to read:

All request, reports, applications, submittals, and other communications to the Control Officer pursuant to this part shall be submitted in duplicate and addressed to the Air Pollution Control Officer, Pima County Health Department, 151 West Congress Street, Tucson, Arizona, 85701; the Control Officer shall forward a copy of each to the Regional Administrator, U.S. Environmental Protection Agency, Region IX, 100 California Street, San Francisco, California, 94111.

B. Any violation of the provisions of the Rules and Regulations described in Rule A shall be considered a violation of the Rules and Regulations of the Pima County Air Pollution Control District.

C. Any owner or operator who plans to install, erect, or construct equipment or facilities which will pollute or has the potential for polluting the atmosphere with Hazardous Air Pollutants as described in the Federal regulations adopted by reference herein shall first obtain an Installation Permit in the manner described in Regulation I, Rule 4 and 5 of those regulations. Before issuing the Installation Permit, in addition to the normal services provided by the Control Officer as described in Regulation I, Rule 4, the Control Officer shall perform any special studies, evaluations, or appraisals necessary for assuring that the planned equipment or facilities will conform and comply with the adopted regulations.

RULES AND REGULATIONS

PINAL-GILA COUNTIES

SECTION 7-1-1 GENERAL

REG. 7-1-1.1 POLICY AND LEGAL AUTHORITY

A. The intent of these regulations is to correct, remove or prevent air pollution in all its forms, including smoke, vapors, dust, windborne matter, fumes and radioactive materials, originating within Pinal and Gila Counties.

B. These regulations are adopted pursuant to the Authority granted by 36-773, Arizona Revised Statutes.

REG. 7-1-1.2 DEFINITIONS

In these regulations, unless the content otherwise requires:

1. "Advisory council" means the Pinal-Gila Counties Air Pollution Control District Advisory council.
2. "Air Contaminants" includes smoke, vapors, charred paper, dust, soot, grime, carbon fumes, gases, mist, odors, particulate matter, windborne matter, radioactive material, or noxious chemicals, or any other material in the outdoor atmosphere.
3. "Air pollution" means the presence in the outdoor atmosphere of one or more air contaminants or combinations thereof in such quantities and of such duration as are or may tend to be injurious to human, plant or animal life, or property.
4. "Department" means the enforcement office of the Air Quality Control District.
5. "Director" means the director of the Air Quality Control District.
6. "Division" means the individual county air pollution divisions making up the Air Quality Control District. These are the Pinal County Air Pollution Division and the Gila County Air Pollution Division.
7. "Discharge" means the release, escape or emission of an air contaminant into the atmosphere so as to cause or contribute to air pollution.

8. "Hearing board" means the Air Quality Control District Hearing Board, which may be either the Pinal or the Gila County hearing board.

9. "Opacity" means a condition of the atmosphere, or any part thereof, in which it is partially or wholly impervious to rays of light. Opacity as used in these regulations refers to a condition of the atmosphere which results in the obscuration of an observer's view.

10. "Open burning" means the combustion of material of any type where the products of combustion are emitted into the atmosphere and are not directed through a stack or chimney.

11. "Particulate matter" means any discrete particles of material other than uncombined water, which are carried in, suspended in or discharged into the atmosphere as a liquid or solid.

12. "Person" means any public or private corporation, company, partnership, firm, association or society of persons, the federal government and any of its departments or agencies, the state and any of its agencies, departments, or political subdivisions, as well as a natural person.

13. "Process weight" means the total amount of all material introduced into an industrial operation or process, exclusive of liquid and gaseous fuels and air used to support combustion.

14. "Process weight per hour" means the total process weight for the entire period of operation or for a typical portion thereof, divided by the number of hours of each period or portion thereof.

15. "Region" means those areas so designated by the administrator of the United States Environmental Protection Agency pursuant to Section 107 of the Federal Clean Air Act as amended, and includes the Phoenix Tucson Intrastate Air Quality Control Region encompassing the Counties of Gila, Maricopa, Pima, Pinal and Santa Cruz.

16. "Ringelmann smoke chart" means the Ringelmann scale for grading the opacity, appearance, density or shade of an emission as published by the U.S. Bureau of Mines, or any chart, recorder, indicator or device for the measurement of emission shade, density or opacity which is approved by the director as the equivalent of the Ringelmann scale.

17. "Smoke" means small gas borne particles, other than water, discharged into the atmosphere in sufficient quantities to be visible.

18. "Source" means and refers to any physical facility, arrangement, device, contrivance, condition or structure which may emit air contaminants.

19. "Standard conditions" means a gas temperature of 60 degrees Fahrenheit and a gas pressure of 14.7 pounds per square inch absolute. All analyses and tests shall be calculated and reported at standard gas temperature and pressure value.

20. "Control officer" means the control officer of the Air Quality Control District.

REG. 7-1-1.3 AIR POLLUTION PROHIBITED

A. No person shall cause, suffer or allow to be discharged either directly or indirectly, into the open air, air contaminants from any source whatever, either in quantity, or of a shade or appearance which is in excess of that specified in the subsequent regulations of this part.

B. Nothing in these regulations shall be interpreted to prevent the discharge or emission of uncontaminated aqueous steam to the open air.

SECTION 7-1-2 PERMITS: INSTALLATION AND OPERATING

REG. 7-1-2.2 PERMIT UNIT DESCRIPTION AND FEES.

A. A separate permit application shall be filed for each permit unit of basic equipment and its intimately connected air pollution control equipment. A major item of air pollution control equipment added after original construction of a permit unit will require a separate permit. A permit unit shall include all items of equipment which operate as a single functional unit.

intimately ←

1. A permit unit shall consist of all items of equipment that are normally required in order that the unit can perform its intended function. Individual items of standby equipment will be considered a part of the permit unit and the horsepower associated with such equipment shall be included for calculation of fees.

2. Any unit capable of performing more than one function but integrated in such a configuration that no single function can operate separately for a period longer than 24 hours, based on normal thru-put rates, shall be considered a single permit unit.

3. Any unit capable of performing more than one function, and so configured that certain functions can be operated separately for periods in excess of 24 hours, shall be considered as more than one permit unit and each such functional unit will constitute a separate permit unit.

4. The point of termination of an individual permit unit shall be considered to be the point at which the product can be stored for a period longer than 24 hours. This may be a bin, tank, pile or any other device whose purpose may be extended storage, feed to another permit unit, storage for loading or shipping of product or any other similar purpose.

B. Storage equipment for solids shall be considered a separate permit unit if capable of storing the production from any source for over 7 days.

C. Atmospheric liquid storage of over 250 gallon capacity whether above or below ground will be considered a separate permit unit if:

1. The contents will consist of a volatile hydrocarbon or organic liquid with an initial boiling point under 300 degrees F, or a vapor pressure at operating temperature in excess of 1-1/2 psia.

2. Or, any heavier fuel oil storage if provided with a means of raising the temperature of the oil in the tank above atmospheric temperature.

3. Or, any atmospheric storage containing a non-organic liquid if the vapors emitted are irritating, dangerous, foul smelling or otherwise objectionable.

4. Each tank in a group of tanks will require a separate permit.

D. All fuel burning equipment, such as furnaces, process heaters, steam producing equipment, space heaters and similar equipment, if the heat release rate is in excess of 500,000 Btu's per hour shall require a permit.

E. All incinerators shall require a permit.

F. Any machine, equipment, incinerator, device or other article, for which an operating permit or conditional permit is required shall be assessed a permit fee per unit in accordance with the following schedules. In the event that more than one fee schedule is applicable to a permit, the governing schedule shall be the one that results in the maximum fee.

SCHEDULE 1

MOTORS - ENGINES

Based on total rated horsepower (or equivalent) of all electric, gasoline, diesel, gas and LPG motors and engines included in permit unit.

Horsepower	Fee
9 and less	$ 20.
10 to 24	25.
25 to 49	50.
50 to 99	85.
100 to 199	125.
200 to 999	175.
1,000 and greater	225.

SCHEDULE 2

FUEL BURNING EQUIPMENT

Based on design fuel consumption, using gross heating values per unit.

Btu per hour	Fee - Type Fuel	
	Gas	Solid - Liquid
Less than 500,000	$ None	$ None
500,000 to 1,500,000	25.	30.
1,500,000 to 5,000,000	50.	60.
5,000,000 to 15,000,000	75.	100.
15,000,000 to 50,000,000	100.	135.
50,000,000 to 750,000,000	135.	175.
750,000,000 and greater	175.	225.

SCHEDULE 3

INCINERATORS

Based on the maximum horizontal inside cross sectional area in square feet, of the primary combustion chamber.

Area in square feet	Fee
Less than 4	$ 20.
4 to 10	30.
10 to 25	50.
25 to 50	75.
50 to 100	125.
100 or greater	175.

SCHEDULE 4

STORAGE EQUIPMENT

Stationary tanks, reservoirs or other containers.

Based on capacities in gallons or cubic equivalent per unit.

Gallons	Fee
Less than 250	$ None
250 to 15,000	10.
15,000 to 40,000	20.
40,000 to 400,000	35.
400,000 to 4,000,000	50.
4,000,000 or greater	75.

G. Equipment requiring an installation permit shall be assessed a fee of $25.00 or a fee equal to one-half of the fee the installation will be assessed for an operating permit, whichever is greater.

H. The annual renewal fee for an operating permit shall be the prescribed operating permit fee under the fee schedules of section F. If the renewal fee is not paid within 30 days after it becomes due, the permit shall be automatically voided.

I. Any item requiring a permit and not included in the fee schedules of Regulation 7-1-2.2, subsection F, shall be assessed a permit fee of $20.00.

J. Seasonal, agricultural related facilities, which normally operate only a few months each year and which are completely inactive for more than six (6) consecutive months between operating periods shall be assessed a fee of one-half of the fee shown in subsection F.

This fee reduction shall not apply to items of equipment, such as incinerators, space heaters, storage tanks, etc. which are not an integral part of the basic processing equipment comprising the facility.

K. The total fee for any single facility regardless of the number of process units involved, shall not exceed $1,000.00.

REG 7-1-2.4 APPEALS TO HEARING BOARD

Within ten days after notice is given by the control officer of denial of an installation permit or of an operating permit, the applicant may petition the hearing board, in writing, for a public hearing. The hearing shall be held as soon as possible, recognizing however, that a thirty day prior notice of the hearing must be publicized. The hearing board, after notice and a public hearing, may sustain, modify or reverse the action of the control officer.

REG. 7-1-2.5 TRANSFER: EXPIRATION: POSTING

A. An installation or an operating permit shall not be transferable, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another or from one person to another.

B. An installation permit shall expire two years from date of its issuance.

C. A person who has been granted an operating permit, shall firmly affix such permit, an approved facsimile of such permit, or other approved identification bearing the permit number upon such machine, equipment, incinerator, device or other article. If so constructed or operated that such permit cannot be so placed, the permit shall be mounted so as to be clearly visible in an accessible place within a reasonable distance of such machine, equipment, incinerator, device or other article, or maintained readily available at all times on the operating premises.

REG. 7-1-2.6 RECORD KEEPING AND REPORTING

A. The owner or operator of any stationary source shall, upon notification from the director, maintain records of the nature and amounts of emissions from such source or any other information as may be deemed necessary by the director to determine whether such source is in compliance with applicable emission limitations or other control measures.

B. The information recorded shall be summarized and reported to the director and shall be submitted within 45 days after the end of the reporting period. Reporting periods are January 1 - June 30 and July 1 - December 31, except that the initial reporting period shall commence on the date the director issues notification of the recordkeeping requirements.

C. Information recorded by the owner or operator and copies of the summarizing reports submitted to the director shall be retained by the owner or operator for two years after the date on which the pertinent report is submitted.

REG. 7-1-2.7 ENFORCEMENT

These regulations shall be enforced according to the provisions of Title 36 Chapter 14, Arizona Revised Statutes.

SECTION 7-1-4 ORDERS OF ABATEMENT

REG. 7-1-4.1 VIOLATIONS: ORDER OF ABATEMENT: TIME FOR COMPLIANCE

When the control officer has reasonable cause to believe that any person is violating any provision of this article or any rule or regulation adopted pursuant to this article or any requirement of an operating or conditional permit issued pursuant to this article he may forthwith serve upon such person by registered or certified mail or in person an order of abatement or may file a complaint alleging violation pursuant to ARS 36-789.01 or both. The order shall state with particularity the act being done that constitutes the violation, shall state in its entirety the certain requirement, provision, or rule or regulation being violated, and that the alleged violator is entitled to a hearing if such hearing is requested in writing within twenty days after the date of issuance of the order. The order may be conditional and require a person to refrain from the particular acts unless certain conditions are met.

REG. 7-1-4.2 HEARINGS ON ORDERS OF ABATEMENT

A. An order of abatement issued by the control officer shall become effective immediately upon the expiration of the time during which a request for a hearing may be made pursuant to Reg. 7-1-4.1, unless the person or persons named in such order shall have made a timely request for a hearing before the hearing board. If a hearing is requested, the hearing board shall hold the hearing as soon as possible, giving due recognition that a thirty day notice of the hearing must be publicized. Written notice of the time and place of the hearing shall be sent by the hearing board to the person or persons requesting the hearing and to the control officer at least fifteen days before the hearing.

B. If the board, after the hearing, determines that the act or acts set forth in the order constitute a violation of any provision of this article or of the rules and regulations adopted pursuant to this article or any requirement of an operating or conditional permit issued pursuant to this article and that no conditional permit is justified, the board shall affirm or modify the order for abatement. The order may be conditional and require a person to refrain from the particular act or acts unless certain conditions are met.

SECTION 7-1-5 REVIEW PROCEDURES

REG. 7-1-5.1 CLASSIFICATION AND REPORTING: PRODUCTION OF RECORDS: CONFIDENTIALITY OF RECORDS: VIOLATION: PENALTY

A. The board of supervisors by rules or regulations which are equal to or more restrictive than those adopted by the director of the department of health services, shall classify air contaminant sources according to levels and types of emissions and other characteristics which relate to air pollution, and shall require reporting for any such class or classes. Reports may be required as to physical outlets, processes and fuels used, and the nature and duration of emissions and as to such other information as is relevant to air pollution and deemed necessary by the board. ←

B. When the control officer has reasonable cause to believe that any person is violating any provision of this article or any rule or regulation adopted pursuant to this article or any requirement of an operating or conditional permit issued pursuant to this article he may request, in writing, that such person forthwith produce all existing books, records and other documents evidencing tests, inspections or studies which may reasonably relate to compliance or noncompliance with rules and regulations adopted pursuant to this article.

C. The owner, lessee, or operator or a potential air contaminant source shall provide, install, maintain, and operate such air contaminant monitoring devices as are reasonable and required to determine compliance in a manner acceptable to the control officer, and shall supply monitoring information as directed in writing by the control officer. Such devices shall be available for inspection by the control officer during all reasonable times. ←

D. Any records or other information furnished to or obtained by the board of supervisors, or the control officer, concerning one or more air pollution sources, which records and information relate to production or sales figures or to the processes or production unique to the owner or operator, or which would tend to adversely affect the competitive position of such owner or operator, shall be only for the confidential use of the board of supervisors, or the control officer in the administration of this article, unless such owner or operator shall expressly agree to their publication or availability to the public. No provision of this section shall be construed to prohibit the appropriate governmental agency from publishing quantitative and qualitative statistics pertaining to the emission of pollutants.

E. Any person violating the provisions of this section or knowingly or willfully submitting false information reports or records to the board of supervisors or the control officer is guilty of a misdemeanor punishable as provided in ARS 36-789.01.

REG. 7-1-5.2 SPECIAL INSPECTION WARRANTY

A. The control officer and his deputies charged under this chapter or the rules and regulations adopted pursuant to this chapter with powers or duties involving inspection of real or personal property including buildings, building premises and building contents for the purpose of air pollution control shall be authorized to present themselves before a magistrate and apply for, obtain and execute special inspection warrants. Such inspections shall be limited to property other than the interior of structures used as private residences.

B. Upon showing by the affidavit of the control officer or his deputies that consent to entry for inspection purposes has been refused or circumstances justify the failure to seek such consent, special inspection warrants may be issued by a magistrate for inspection of public or private, real or personal properties. Such warrants shall not be necessary in the case of an emergency where there is an imminent and substantial endangerment to the health of persons.

C. The warrant shall be in substantially the following form: "County of ..., State of Arizona to any control officer or deputy control officer in the county of ... proof by affidavit having been this day made before me by (person or persons whose affidavit has been taken) that in and upon certain premises in the (city, town or county) of ... and more particularly described as follows: (describe the premises with reasonable particularity) there now exists a reasonable governmental interest to determine if said premises comply with (section ... of the Arizona Revised Statutes) and/or (section ... of regulation and ordinance), you are therefore commanded in the day time (or during reasonable business hours), to make an inspection of said premises as soon as practicable.

Date, signature and title of office."

The endorsement on the warrant shall be in substantially the following form:

"Received by me..., 19 , at .. o'oclock ... (name of control officer or deputy control officer)."

The return of officer shall be in substantially the following form: "I hereby certify that by virtue of the within warrant I searched the named premises and found the following things (describe findings).

Dated this ... day of ..., 19..

(name of control officer or deputy control officer)".

D. The warrant may be served by the control officer or his deputies mentioned in its directions, but by no other person except in aid of the control officer or his deputies, on his requiring it, the control officer or his deputies being present and acting in its execution.

E. A warrant shall be executed and returned to the magistrate who issued it within ten days after its date. After the expiration of that time, the warrant shall, unless executed, be void.

F. Any person who willfully refuses to permit an inspection lawfully authorized by warrant issued pursuant to this article is guilty of a misdemeanor.

REG. 7-1-5.3 DECISIONS OF HEARING BOARDS: SUBPOENAS: EFFECTIVE DATE.

A. All decisions of the hearing board, including the majority of opinion and all concurring and dissenting opinions, shall be in writing and shall be of public record.

B. A majority of the total membership of the hearing board shall concur in a decision of it to have effect.

C. The chairman or, in his absence, the vice-chairman may issue subpoenas to compel attendance of any person at a hearing and require the production of books, records and other documents material to a hearing. Obedience to subpoenas may be enforced pursuant to section 12-2212 of the Arizona Revised Statutes.

D. Subject to the approval of the board of supervisors, the hearing board may adopt a manual of procedures governing its operation.

E. Decisions of the hearing board shall become effective not less than thirty days after they are issued unless:

   1. A rehearing is granted which shall have the effect of staying the decision.

   2. It is determined that an emergency exists which justifies an earlier effective date.

F. The hearing board may revoke or modify an order of abatement, a permit or a conditional permit only after first holding a public hearing, notice of such hearing shall be as provided in Reg. 7-1-5.5 and shall be publicized at least thirty days prior to the hearing.

REG. 7-1-5.4 JUDICIAL REVIEW: GROUNDS: PROCEDURES

A. Judicial review of hearing board decisions shall be pursuant to the provisions of title 12, chapter 7, article 6, except as provided in this section.

B. Within thirty days after service of notice of a final decision or order of the board, or an order denying a rehearing timely applied for, any person who was a part of record in the proceeding before the board, including the control officer or department authorized or designated to enforce air pollution regulations, may appeal therefrom to the superior court in the county in which the hearing was conducted and the scope of such review shall be determined pursuant to section 12-910 of the Arizona Revised Statutes.

C. A notice of appeal, designating the grounds therefore, and demand in writing for a certified transcript of the testimony and exhibits shall be filed with the court and served on the board. After receipt of the demand, accompanied by payment of a fee of the current prevailing rate for transcript, and one dollar for certification thereof, the board shall make and certify the transcript and file it with the clerk of the court to which the appeal has been taken within thirty days, unless extended by agreement of the parties or order of the court.

D. When an appeal is taken from an order or decision of the board, such order or decision shall remain in effect pending final determination of the matter, unless stayed by the court, on a hearing after notice to the board and upon finding by the court that there is probable cause for appeal and that great or irreparable damage may result to the petitioner warranting such stay.

E. An appeal may be taken to the court of appeals from the order of the superior court as in other civil cases. Proceedings under this section shall be given precedence and brought to trial ahead of other litigation concerning private interests and other matters that do not affect public health and welfare.

REG. 7-1-5.5 NOTICE OF HEARING: PUBLICATION: SERVIEE.

A. Any notice of hearing required by this article shall be given by publication of a notice of hearing for at least two times in a newspaper of general circulation published in the county concerned or if there is no such newspaper published in the county, in a newspaper of general circulation published in an adjoining county, and by posting copies of the petition and notice in at least three conspicuous places in the county.

B. If the hearing involves any violation of rules or regulations adopted pursuant to this article or a conditional permit therefrom then, in addition to the requirements of subsection A., the person allegedly committing or having committed the violation or requesting the conditional permit, shall be served personally or by registered or certified mail at least fifteen days prior to the hearing with a written notice of hearing.

REG. 7-1-5.6 INJUNCTIVE RELIEF

Upon the failure or refusal or a person to comply with an order for abatement by the hearing board or the control officer in cases where an order for abatement has become effective, the county may file an action in the superior court of that county to restrain and enjoin the person from engaging in further acts violating the order of abatement. The court shall proceed as in other actions for injunctions. In the preliminary hearing in an action for an injunction or restraining order brought pursuant to this article, any findings of the hearing board shall be prima facie evidence of the fact or facts found therein until rebutted.

SECTION 7-2-1 AMBIENT AIR QUALITY STANDARDS

REG. 7-2-1.1 NON-SPECIFIC PARTICULATE

A. Maximum annual geometric mean-limit of 60 micrograms per cubic meter.

B. Maximum 24-hour arithmetic average-limit of 150 micrograms per cubic meter.

REG. 7-2-1.2 SULFUR DIOXIDE

A. Maximum annual average-limit of 50 micrograms per cubic meter.

B. Maximum 24-hour average-limit of 260 micrograms per cubic meter.

C. Maximum 3-hour average-limit of 1,300 micrograms per cubic meter.

REG. 7-2-1.3 NON-METHANE HYDROCARBONS

Three-hour average (6-9 A.M.) - limit of 160 micrograms per cubic meter.

REG. 7-2-1.4 PHOTOCHEMICAL OXIDANTS

A. One-hour average-limit of 160 micrograms per cubic meter.

REG. 7-2-1.5 CARBON MONOXIDE

A. One-hour average-limit of 40 milligrams per cubic meter.

B. Eight-hour average-limit of 10 milligrams per cubic meter.

REG. 7-2-1.6 NITROGEN DIOXIDE

Maximum annual average-limit of 100 micrograms per cubic meter.

REG. 7-2-1.7 EVALUATION

The evaluation of air quality in terms of procedure, methodology and concept is to be consistent with the guidelines of the Federal Environmental Protection Agency.

REG. 7-2-1.8 ANTI-DEGRADATION

These standards shall not be construed as permitting the preventable degradation of air quality in any area of Pinal and Gila Counties.

SECTION 7-3-1 EMISSION STANDARDS - PARTICULATES

(50.1.2) REG. 7-3-1.1 VISIBLE EMISSIONS: GENERAL

Except as otherwise provided in these regulations relating to specific types of sources, the opacity of any plume or effluent shall not be as great as nor greater than that designated as No. 2 on the Ringelmann chart or percent opacity equivalent to No. 2 Ringelmann, except when the provisions of Reg. 7-1-2.8 apply.

REG. 7-3-1.2 FUGITIVE DUST

A. No person shall cause, suffer, allow or permit a building or its appurtenances or open area to be used, constructed, repaired, altered or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Dust and other types of particulates shall be kept to a minimum by such measures as wetting down, covering, landscaping, paving, treating or by other reasonable means.

B. No person shall cause, suffer, allow or permit the repair, construction or reconstruction of a roadway or alley without taking reasonable precautions to prevent particulate matter from becoming airborne. Dust and other particulates shall be kept to a minimum by employing temporary paving, dust palliatives, wetting down, detouring or by other reasonable means. Earth or other material shall be removed from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water or by other means.

C. No person shall cause, suffer, allow or permit transportation or material likely to give rise to airborne dust without taking reasonable precautions to prevent particulate matter from becoming airborne.

D. No person shall cause, suffer, allow or permit crushing, screening handling or conveying of materials or other operations likely to give rise to airborne dust without taking reasonable precautions to prevent particulate matter from becoming airborne such as spray bars and wetting agents.

E. No person shall cause, suffer, allow or permit the performance of agricultural practices including but not limited to tilling of land and application of fertilizers without taking reasonable precautions to prevent particulate matter from becoming airborne.

REG. 7-3-1.3 OPEN BURNING

It shall be unlawful for any person to ignite, cause to be ignited, direct to be ignited, or allow any open outdoor fire within the Pinal and Gila Counties except as provided in this regulation.

A. Fires used only for the domestic cooking of food, for providing warmth for human beings, for recreational purposes and for the branding of animals may be conducted without permit provided they do not create a public nuisance.

B. All other excepted open burning must be under written permit issued by the director who will determine the conditions and time most advantageous for minimizing air pollution and protecting the health, safety and comfort of persons from the effects of the burning. The director may designate a public official as his representative to issue such a permit on forms provided by the director. Fires permitted subject to these stipulations are:

1. Fires declared as necessary in writing to the director by:

   a. The State Entomologists as essential for the purpose of disease and/or pest prevention.

   b. Any public official in the performance of official duty for the control of weeds, the prevention of a fire hazard, the disposal of dangerous material where no alternative exists, or the instruction in the fighting of fires.

   c. The federal government or any of its department, agencies or agents, the state or any of its agencies, departments or subdivisions, for the purpose of watershed rehabilitation or control through vegetative manipulation.

2. Fires permitted by the director for the burning of agricultural ditch banks, fence rows, and canal laterals with high temperature mechanical burners, and tumbleweeds where reasonable removal is not indicated.

C. The issuance by the director of a permit to burn does not release the permittee from any of the requirements of a fire department having jurisdiction, and a permit so issued must be validated by such fire department to be effective.

VIOLATIONS

Violations of this section are punishable by administrative process or as a misdemeanor as provided by ARS 36-789.01.

REG. 7-3-1.4 INCINERATION

A. Notwithstanding the provisions of Reg. 7-3-1.1, no person shall cause, suffer, or allow to be emitted into the atmosphere, from any incinerator, smoke for more than 30 seconds in any 60 minute period the appearance, density, opacity or shade of which is as dark as No. 1 of the Ringelmann Scale.

B. No person shall cause, suffer, allow or permit to be emitted into the atmosphere from any incinerator or to pass a convenient measuring point near the incinerator stack outlet particulate matter to exceed 0.17 pounds per 1,000 pounds of gases, corrected to 50 percent excess air and calculated as if no auxiliary fuel had been used.

REG. 7-3-1.5 WOOD WASTE BURNERS

For a device used by the lumber industry exclusively for the burning of wood wastes, the provisions of Reg. 7-3-1.4 shall apply except during the building of a new fire not more than once each day for a period not to exceed 60 consecutive minutes. Upset time of three minutes in any one hour will not be considered a violation of these regulations.

REG. 7-3-1.6 REDUCTION OF ANIMAL OR VEGETABLE MATTER

No person shall operate or use any machine, equipment or other contrivances for the treatment or processing of animal or vegetable matter, separate or in combination, unless all gases, vapors and gas-entrained effluents from such operation, equipment or contrivance have been:

1. Incinerated at temperatures of not less than 1,200 degrees Fahrenheit for a period of not less than 0.3 seconds, or

2. Processed in a manner determined to be equally or more effective for the control of air pollution.

3. All persons owning or responsible for any process involving the reduction of animal and/or vegetable matter shall provide properly constructed facilities and install and maintain in good working order such devices as are necessary to prevent emissions of air contaminants.

REG. 7-3-1.7 FUEL-BURNING EQUIPMENT

A. This regulation applies to installations in which fuel is burned for the primary purpose of producing steam, hot water, hot air or other liquids, gases or solids and in the course of doing so the products of combustion do not come into direct contact with process materials. When any products or by-products of a manufacturing process are burned for the same purpose or in conjunction with any fuel, the same maximum emission limitations shall apply.

B. The heat content of coal shall generally be determined according to ASTM Method D-271, "Laboratory Sampling and Analysis of Coal or Coke" or ASTM Method D-2015, "Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter". These methods shall be used as guides but may be modified, adjusted or added to by the director to suit, specific sampling conditions or needs based upon good practice, judgement and experience.

C. For purposes of this regulation, the heat input shall be the aggregate heat content of all fuel whose products of combustion pass through a stack or other outlet. The heat input value used shall be the equipment manufacturer or designer's guaranteed maximum input, whichever is greater. The total heat input of all fuel-burning units on a plant or premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted.

D. No person shall cause, suffer, allow or permit the emission of particulate matter, caused by combustion of fuel, from any fuel-burning operation in excess the quantity set forth in the following table:

HEAT INPUT MILLIONS OF BRITISH THERMAL UNITS (BTU) PER HOUR	MAXIMUM ALLOWABLE EMISSION OF PARTICULATE MATTER IN POUNDS PER HOUR PER MILLION BRITISH THERMAL UNITS (BTU) OF HEAT INPUT BASED UPON 24 HOUR ARITHMETIC AVERAGE
10	0.599
50	0.413
100	0.352
500	0.243
1,000	0.207
4,000	0.153
8,000	0.103
10,000	0.0909
15,000	0.0722
20,000	0.0613
40,000	0.0414
50,000	0.0364
100,000	0.0246

E. Interpolation of the data in this table for heat inputs greater than ten but less than 4,000 million Btu per hour shall be accomplished by use of the equation $Y = 1.02X^{-0.231}$. Interpolation and extrapolation of the data for heat inputs equal to or greater than 4,000 million Btu per hour shall be accomplished by use of the equation $Y = 17.0X^{-0.568}$ where Y = allowable rate of emission in pounds per million Btu and X = maximum equipment capacity rate in million Btu per hour.

(50.1.1) REG. 7-3-1.8 PROCESS INDUSTRIES

A. No person shall cause, suffer, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any existing process source whatsoever, except incineration and fuel-burning equipment, in total quantities in excess of the amount calculated by the equation presented below and as illustrated by the following table on the allowable rate of emission based on process weight rate:

PROCESS WEIGHT RATE		EMISSION RATE	PROCESS WEIGHT RATE		EMISSION RATE
Lbs/Hr.	Tons/Hr.	Lbs/Hr.	Lbs/Hr.	Tons/Hr.	Lbs/Hr.
100	0.05	0.551	16,000	8.00	16.5
200	0.10	0.877	18,000	9.00	17.9
400	0.20	1.40	20,000	10.00	19.2
600	0.30	1.83	30,000	15.00	25.2
800	0.40	2.22	40,000	20.00	30.5
1,000	0.50	2.58	50,000	25.00	35.4
1,500	0.75	3.38	60,000	30.00	40.0
2,000	1.00	4.10	70,000	35.00	41.3
2,500	1.25	4.76	80,000	40.00	42.5
3,000	1.50	5.38	90,000	45.00	43.6
3,500	1.75	5.96	100,000	50.00	44.6
4,000	2.00	6.52	120,000	60.00	46.3
5,000	2.50	7.58	140,000	70.00	47.8
6,000	3.00	8.56	160,000	80.00	49.0
7,000	3.50	9.49	200,000	100.00	51.2
8,000	4.00	10.4	1,000,000	500.00	69.0
9,000	4.50	11.2	2,000,000	1,000.00	77.6
10,000	5.00	12.0	6,000,000	3,000.00	92.7
12,000	6.00	13.6			

Note: To use the table, determine the process weight rate as defined in Reg. 7-1-1.2, 14. Find this figure on the table, opposite which is the maximum number of pounds per hour of particulates which may be discharged into the atmosphere in any one hour. The method used for determining allowable rates of emission based on process weight tables is as follows: Interpolation of the data in the process weight table for process weight rates up to 60,000 lbs/hr shall be accomplished by use of the equation $E = 4.10\ p^{0.67}$ and interpolation and extrapolation of the data for process weight rates in excess of 60,00 lbs/hr shall be accomplished by use of the equation $E = 55.0\ p^{0.11} - 40.0$, where E = rate of emission in lbs/hr and P = process weight rate in tons/hr. (See following examples.)

[illegible] 2 [illegible]

EXAMPLE A: Process weight = tons per hour

Equation - $E = 4.10\ p^{0.67}$

$$\begin{aligned}
\text{Log } E &= \text{Log } 4.10 + (0.67)\ (\text{Log } 6)\\
\text{Log } E &= 0.6128 + (0.67)\ (0.7782)\\
\text{Log } E &= 0.6128 + 0.5214\\
\text{Log } E &= 1.1342\\
E &= \text{Anti-log } 1.1342\\
E &= 13.6 \text{ pounds per hour}
\end{aligned}$$

EXAMPLE B: Process weight = 60 tons per hour

Equation - $E = 55.0\ P^{0.11} - 40.0$

$$\begin{aligned}
\text{Log }(E+40.0) &= (\text{Log } 55.0 + (0.11)\ \ (\text{Log } 6) \\
\text{Log }(E+40.0) &= 1.7404 + (0.11)\ \ (1.7782) \\
\text{Log }(E+40.0) &= 1.7404 + 0.1956 \\
\text{Log }(E+40.0) &= 1.9360 \\
(E+40.0) &= \text{Anti-log } 1.9360 \\
(E+40.0) &= 86.3 \\
E &= 86.3 - 40.0 \\
E &= 46.3 \text{ pounds per hour}
\end{aligned}$$

C. Any process source subject to allowable rate of emissions as defined in 7-3-1.8 A must capture, to the maximum practical extent, all particulate matter resulting from operation of individual equipment comprising the complete process. Failure to control these "Fugitive" emissions in a manner satisfactory to the Director, or which exceed the requirements of Reg. 7-3-1.1, will result in a non-compliance status even though the requirements of 7-3-1.8 A have been complied with. Fugitive dust resulting from vehicular movement required by normal operation of a process source must be controlled as defined by Reg. 7-3-1.2.

SECTION 7-3-2 EMISSION STANDARDS - SULFUR DIOXIDE

REG. 7-3-2.2 FUEL BURNING INSTALLATIONS

A. This regulation applies to an installation operated for the purpose of producing power with a resulting discharge of sulfur dioxide in the installation's effluent gases.

B. Steam power generating installations which are new sources shall not emit more than 0.80 pounds of sulfur dioxide; maximum two-hour average, per million Btu heat input when oil is fired. Steam power generating installations which are existing sources shall not emit more than 1.0 pounds of sulfur dioxide, maximum two-hour average, per million Btu heat input when coal is fired.

REG. 7-3-2.3 SULFITE PULP MILLS

No person shall cause, suffer, allow or permit discharge into the atmosphere of an amount in excess of nine pounds of sulfur oxides, calculated as sulfur dioxide, per air-dried ton of pulp produced from a sulfite pulp mill. The total emissions shall include sulfur oxides emitted from blow pits, washer vents, storage tanks and digester relief and recovery system.

REG. 7-3-2.4 SULFURIC ACID PLANTS

A. No person shall cause, suffer, allow or permit discharge into the atmosphere of more than 4.0 pounds of sulfur dioxide per ton of sulfuric acid produced (calculated as 100 percent H_2SO_4), the maximum two-hour average, from facilities that produce sulfuric acid by the contact process by burning elemental sulfur, alkylation acid, hydrogen sulfide, organic sulfides and mercaptans or acid sludge.

B. No person shall cause, suffer, allow or permit discharge into the atmosphere of more than 0.15 pounds of sulfuric acid mist per ton of sulfuric acid produced (calculated as 100 percent H_2SO_4), maximum two-hour average, expressed as H_2SO_4, from facilities that produce sulfuric acid by the contact process by burning elemental sulfur, alkylation acid, hydrogen sulfide, organic sulfides and mercaptans or acid sludge.

C. This regulation shall not apply to existing sources nor to metallurgical plants or other facilities where conversion to sulfuric acid is utilized as a means of controlling emission to the atmosphere of sulfur dioxide or other sulfur compounds.

REG. 7-3-2.5 OTHER INDUSTRIES

No person shall cause, suffer, allow or permit to be discharged into the atmosphere from any other industry not covered in prior regulations of this section reduced sulfur, which includes sulfur equivalent from all sulfur emissions including but not limited to sulfur dioxide, sulfur trioxide and sulfuric acid, in excess of ten percent of the sulfur entering the process as feed.

SECTION 7-3-3 EMISSION STANDARDS - ORGANIC COMPOUNDS FROM STATIONARY SOURCES

REG. 7-3-3.1 STORAGE OF VOLATILE ORGANIC COMPOUNDS

A. A person shall not place, store or hold in any stationary tank, reservoir or other container of more than 40,000 gallons capacity any gasoline or any petroleum distillate having a vapor pressure of 1.5 pounds per square inch absolute or greater under actual storage conditions unless such tank, reservoir or other container is a pressure tank maintaining working pressures sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere, or is equipped with a floating roof or vapor recovery system or other vapor emission control device.

B. No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more unless such tank is equipped with either submerged filling inlets or with vapor recovery or emission control systems such that loss of vapor to the atmosphere during filling operations shall be minimized. The provisions of this Section B shall not apply to the loading of gasoline into any tank having a capacity of less than 2,000 gallons which was installed prior to June 26, 1967 nor to any underground tank installed prior to June 26, 1967 where the fill line between the fill connection and tank is offset.

REG. 7-3-3.2 LOADING OF VOLATILE ORGANIC COMPOUNDS

All facilities for dock loading of petroleum products having a vapor pressure of 1.5 pounds per square inch absolute or greater at loading pressure, shall provide for submerged filling or acceptable equivalent for control of hydrocarbon emissions.

(51.18) REG. 7-3-3.3 PUMPS AND COMPRESSORS

All pumps and compressors which handle volatile organic compounds shall be equipped with mechanical seals or other equipment of equal efficiency to prevent the release of organic contaminants into the atmosphere.

(50.4) REG. 7-3-3.4 ORGANIC SOLVENTS: OTHER VOLATILE COMPOUNDS

Materials such as solvents or other volatile compounds including but not limited to paints, acids, alkalies, pesticides, fertilizer and manure, shall be processed, stored, used and transported in such a manner and by such means that they will not unreasonably evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution; and where means are available to reduce effectively the contribution to air pollution from evaporation leakage or discharge, the installation and use of such control methods, devices or equipment shall be required.

SECTION 7-3-4 EMISSION STANDARDS - CARBON MONOXIDE FROM STATIONARY SOURCES

(50.5) REG. 7-3-4.1 INDUSTRIAL

No person shall cause, suffer, allow or permit discharge from any source carbon monoxide emissions without the use of complete secondary combustion of waste gases generated by any process source.

SECTION 7-3-5 EMISSION STANDARDS - NITROGEN OXIDES

(51.7) REG. 7-3-5.1 FUEL BURNING EQUIPMENT

A. This regulation applies to an installation operated for the purpose of producing power with a resulting discharge of nitrogen oxides in the installation effluent gases.

B. Steam power generating installations which are new sources shall not emit more than 0.20 pounds of nitrogen oxides, maximum two-hour average, calculated as nitrogen dioxide, per million Btu heat input when gaseous fossil fuel is fired.

C. Steam power generating installations which are new sources shall not emit more than 0.30 pounds of nitrogen oxides, maximum two-hour average, calculated as nitrogen dioxide, per million Btu heat input when liquid fossil fuel is fired.

D. Steam power generating installations which are new sources shall not emit more than 0.70 pounds of nitrogen oxides, maximum two-hour average, calculated as nitrogen dioxide, per million Btu heat input when solid fossil fuel is fired.

(51.18) REG. 7-3-5.2 NITRIC ACID PLANTS

A. No person shall cause, suffer, allow or permit discharge from any new source nitric acid plant producing weak nitric acid, which is 30 to 70 percent in strength, by either the increased pressure or atmospheric pressure process, of more than 3.0 pounds of total oxides of nitrogen per ton of acid produced, maximum two-hour average, expressed as nitrogen dioxide.

B. No person shall cause, suffer, allow or permit discharge from any existing source nitric acid plant producing weak nitric acid, which is 30 to 70 percent in strength, by either the increased pressure or atmospheric pressure process, of more than 5.5 pounds of total oxides of nitrogen per ton of acid produced, maximum two-hour average, expressed as nitrogen dioxide.

SECTION 7-3-6 MAJOR SOURCES

REG. 7-3-6.1 POLICY AND LEGAL AUTHORITY

A. The intent of these regulations is to define those sources of air pollution as of the effective date of these regulations which are capable of generating less than seventy-five tons of air contaminants per day and thereby under the original jurisdiction and control of the Division and the Hearing Board.

B. These regulations are adopted pursuant to the duty contained in 36-773 Arizona Revised Statutes.

RULES AND REGULATIONS

YUMA COUNTY

SECTION 8-1-1. GENERAL

REG. 8-1-1.1 POLICY AND LEGAL AUTHORITY

A. The intent of these regulations is to control, reduce, remove or prevent air pollution in all its forms, including all air contaminants defined in this section, originating within Yuma County.

B. These regulations are adopted pursuant to the authority granted by § 36-779, Arizona Revised Statutes.

REG. 8-1-1.2 DEFINITIONS

A. In these regulations, unless the context otherwise requires:

1. "Advisory Council" means the Yuma County Air Pollution Control Advisory Council appointed by the Yuma County Board of Supervisors.

2. "Agricultural Burning" means open fires used in Agricultural operations, in the growing of crops or raising of fowls or animals, or range improvement; involving three acres or greater and for the purpose of weed abatement.

3. "Air Contaminants" include smoke, vapors, charred paper, dust, soot, grime, carbon, fumes, gases, sulfuric acid mist aerosols, aerosol droplets, odors, particulate matter, windborne matter, radioactive materials, noxious chemicals or any other material in the outdoor atmosphere.

4. "Air Pollution" means the presence in the outdoor atmosphere of one or more air contaminants or combination thereof in sufficient quantities, which either alone or in connection with other substances by reason of their concentration and duration, are or tend to be injurious to human, plant or animal life or cause damage to property, or unreasonably interferes with the comfortable enjoyment of life or property of a substantial part of a community or obscures visibility or which in any way degrades the quality of the ambient air below the standards established by the board of supervisors.

5. "Air Pollution Control Equipment" means equipment used to eliminate reduce or control the discharge of air contaminants into the ambient air.

6. "Air Pollution Source" means any physical facility, arrangement, device, contrivance, condition or structure which may emit contaminants.

7. "Ambient Air" means that portion of the atmosphere, external to buildings, to which the general public has access.

8. "Approved" means approved in writing by the Yuma County Air Pollution Control Officer.

9. "ASME" means American Society of Mechanical Engineers. All ASME test methods referenced as guides in these rules and regulations shall be the most current methods.

10. "ASTM" means American Society for Testing and Materials. All ASTM test methods referenced as guides in these rules and regulations shall be the most current methods.

11. "BTU" means British thermal unit which is the quantity of heat required to raise the temperature of one pound of water one degree Fahrenheit.

12. "Burn Hours" means those hours during any day on which the Control Officer, after consultation with the National Weather Service, does not prohibit open burning.

13. "Closed Loop Operational Control" means the rapid curtailment or cessation of smelter emissions in order to prevent the occurrence of ambient air concentration in excess of the standards prescribed in Section 8-1-2. A closed loop system is composed of:

    a. Continuous air sampling and analyzing equipment in eight or more locations for effective monitoring of smelter emissions. The sampler sites shall be located at points of maximum concentration as determined by diffusion modeling procedures.

    b. Communications adequate to alert the smelter and the division to one or more predetermined pollutant levels requiring specified remedial actions at the smelter.

    c. Procedures capable of effecting rapid emission curtailment or cessation.

    d. A procedure to report the incident to the division including information on pollutant levels, local meteorology, smelter operation at the time of the incident and smelter operational response.

14. "Combustion" means the burning of matter.

15. "Control Officer" means the Director of the Yuma County Health Department or his authorized representative.

16. "Department" means the Yuma County Health Department.

17. "Discharge" means the release, escape or emission of an effluent into the ambient air.

18. "Division" means the division of air pollution control within the Yuma County Health Department.

19. "Dust" is finely divided solid particulate matter occurring naturally or created by mechanical processing, handling or storage of materials in the solid state.

20. "Effluent" is any material which is emitted and subsequently escapes into the ambient air.

21. "Emission" means the act of passing into the atmosphere an air contaminant or a gas stream, visible or invisible.

22. "Equivalent Opacity Scale" means a measurement index for ranking plumes in terms of opacities equivalent to opacities of the Ringelmann Scale using percent opacity as the unit of measurement.

23. "Existing Source" means any source which is not a new source.

24. "Fuel" means any material which is burned for the purpose of producing energy.

25. "Fugitive dust" means uncontrolled dust.

26. "Fume" means solid particulate matter resulting from the condensation and subsequent solidification of vapors of melted solid materials.

27. "Gasoline" means any petroleum distillate having a Reid vapor pressure of four pounds or more.

28. "Hearing Board" means the Yuma County Air Pollution Control Hearing Board, appointed by the Yuma County Board of Supervisors.

29. "Heat input" is the quantity of heat in terms of Btu's generated by fuels fed into fuel burning equipment under conditions of complete combustion.

30. "Incinerator" means any equipment, machine, device, contrivance, apparatus or other article and all appurtenances thereof used for the destruction by burning of refuse, salvage material or any other combustible material.

31. "Motor Vehicle" means any self-propelled vehicle designed for transporting persons or property on public highways.

32. "New Source" means any source of air pollution or potential source of air pollution, the construction or modification of which was commenced after the effective date of Federal Standards appropriately applicable to such new source. For purposes of this definition, the following terms shall have the meanings specified:

a. "Commenced" means that an owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a binding agreement or contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.

b. "Construction" means fabrication, erection, or installation of an affected facility.

c. "Modification" means any physical change in, or change in the method of operation of, an affected facility which increases the amount of any air pollutant (to which a standard applies) emitted by such facility or which results in the emission of any air pollutant (to which a standard applies) not previously emitted, except that:

Delete

(1) Routine maintenance, repair and replacement shall not be considered physical changes;

(2) The following shall not be considered a change in the method of operations:

(a) An increase in the production rate, if such increase does not exceed the operating design capacity of the affected facility;

(b) An increase in hours of operation;

(c) Use of an alternative fuel or raw material if prior to the effective date of the appropriately applicable Federal Standards, the affected facility was designed to accommodate such alternative use.

33. "No Burn Hours" means any day on which the Control Officer after consultation with the National Weather Service, prohibits any open burning, this includes weekends and/or legal holidays.

34. "Opacity" means the degree of obscuration of transmitted light.

35. "Open Outdoor Burning" means any combustion of combustible material of any type outdoors, in the open, where the products of combustion are not directed through a flue. "Flue", as used in this definition means any duct or passage for air, gases or the like, such as a stack or chimney.

36. "Operation" means any physical or chemical action resulting in the change in location, form physical properties or chemical character of a material.

37. "Particulate Matter" means any finely divided liquid or solid material, other than uncombined water, as measured by Method 5 described in "Title 40 Part 60 of the Federal Regulations", dated December 23, 1971 or by an approved equivalent ASME testing procedure.

38. "Percent Opacity" means a unit of measurement shown on the equivalent opacity scale.

39. "Permanent Production Curtailment" means reduction of sulfur input on a continuing basis.

40. "Person" includes any public or private corporation, company, partnership, firm, association or society of persons, the federal government and any of its departments or agencies, the state and any of its agencies, departments or political subdivisions, as well as a natural person.

41. "Plume" means visible effluent.

42. "Positive Control" means permanent Production curtailment or the operation of emission control equipment of sulfur removal techniques or any combination thereof.

43. "PPM" means parts per million by volume.

44. "Process" means one or more operations, including equipment and technology, used in the production of goods or services or the control of by-products or waste.

45. "Process Source" means the last operation or process which produces an air contaminant resulting from (a) the separation of the air contaminant from the process material or (b) the conversion of constituents of the process materials into air contaminants and which is not an air pollution abatement operation.

46. "Process weight" means the total weight of all materials introduced into a process source, including fuels, where these contribute to pollution generated by the process.

47. "Process Weight Rate" means a rate established as follows:

   a. For continuous or long-run, steady-state process sources, the total process weight for the entire period of continuous operation or for a typical portion thereof, divided by the number of hours of such period or portion thereof.

   b. For cyclinical or batch process sources, the total process weight for a period which covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such period.

48. "Reid vapor pressure" means the vapor pressure of a volatile material, such as gasoline, as determined by the Reid Method (ASTM D323) or the vapor pressure at 100 degrees Fahrenheit (F°).

49. "Ringelmann chart" means a standardized device published in the U.S. Bureau of Mines Information Circular No. 8333, employing a graduated series of opacities according to the Ringelmann scale.

50. "Ringelmann number" means the unit of measurement on the Ringelmann scale.

51. "Ringelmann scale" means a standardized rank of opacities using the Ringelmann number as the unit of measurement employed when determining the opacity of a plume.

52. "Smelter feed" means all materials utilized in the operation of a copper smelter including metals or concentrates, fuels and chemical reagents and shall be calculated as the aggregate sulfur content of all fuels and other feed materials whose products of combustion and gaseous by-products are emitted to the atmosphere.

53. "Smoke" means particulate matter resulting from incomplete combustion.

54. "Soot" means the carbonaceous particulate product of incomplete combustion which may be a component of smoke.

55. "Standard conditions" means the gas temperature of 60°F and a gas pressure of 14.7 pounds per square inch absolute.

56. "Vapor" means the gaseous form of a substance normally occurring in a liquid or solid state.

57. "Vapor pressure" means the pressure exerted by the gaseous form of a substance in equilibrium with its liquid or solid form.

58. "Volatility" means the capability of a substance to vaporize or change to the vapor form.

2.0 REG. 8-1-1.3 AIR POLLUTION PROHIBITED

A. No person shall cause, suffer, allow or permit to be discharged either directly or indirectly, into the ambient air, air contaminants from any source whatsoever in violation of subsequent sections of these regulations.

B. Nothing in these regulations shall be interpreted to prevent the discharge or emission of uncontaminated aqueous steam in the open air unless such discharge constitutes a safety hazard.

C. Nothing in these regulations shall be interpreted to prevent the air pollution inside of buildings except as this relates to the ultimate release of contaminants to the ambient air.

Redo in nall letter

D. Control methods utilized to comply with the requirements of these regulations shall not create air contaminants in concentrations in excess of applicable standards.

(12.0) REG. 8-1-1.4 RECORDKEEPING AND REPORTING

A. The owner or operator of any stationary source shall, upon notification from the Control Office, maintain records of the nature and amounts of emissions from such source or any other informations as may be deemed necessary by the Control Officer to determine whether such source is in compliance with applicable emission limitations or other control measures.

sub from

B. The information recorded shall be summarized and reported to the Control Officer and shall be submitted within 45 days after the end of the reporting period. Reporting periods are January 1 - June 30 and July 1 - December 31, except that the initial reporting period shall commence on the date the Control Officer issues notification of the recordkeeping requirements.

C. Information recorded by the owner or operator and copies of the summarizing reports submitted to the Control Officer shall be retained by the owner or operator for two years after the date on which the pertinent report is submitted.

(15.0) REG. 8-1-1.5 ENFORCEMENT

These regulations shall be enforced according to the provisions of Title 36, Chapter 6 Article 8, Air Pollution, Arizona revised Statutes.

r

SECTION 8-1-2. AMBIENT AIR QUALITY STANDARDS

(4.1) REG. 8-1-2.1 NON-SPECIFIC PARTICULATE

A. Maximum annual geometric mean - Limit of 60 micrograms per cubic meter.

-206-

B. Maximum 24-hour arithmetic average - Limit of 150 micrograms per cubic meter.

(4.2) REG. 8-1-2.2 SULFUR DIOXIDE

A. Maximum annual average - Limit of 50 micrograms per cubic meter.

B. Maximum 24-hour average - Limit of 260 micrograms per cubic meter.

C. Maximum 3-hour average - Limit of 1,300 micrograms per cubic meter.

(4.4) REG. 8-1-2.3 NON-METHANE HYDROCARBONS

Three hour - average (6 to 9 A.M.) - Limit of 160 micrograms per cubic meter.

delete

(4.6) REG. 8-1-2.4 PHOTOCHEMICAL OXIDANTS

A. One-hour average - Limit of 160 micrograms per cubic meter.

(4.5) REG. 8-1-2.5 CARBON MONOXIDE

milli

A. One-hour average - Limit of 40 milligrams per cubic meter.

B. Eight-hour average - Limit of 10 milligrams per cubic meter.

(4.3) REG. 8-1-2.6 NITROGEN DIOXIDE

Maximum annual average - Limit of 100 micrograms per cubic meter.

(2.9) REG. 8-1-2.7 EVALUATION

The evaluation of air quality in terms of procedure, methodology and concept is to be consistent with the guidelines of the Federal Environmental Protection Agency.

(8.1) REG. 8-1-2.10 EMERGENCY EPISODE CRITERIA

A. Conditions justifying the proclamation of an air pollution alert, air pollution warning, or air pollution emergency shall be deemed to exist whenever the director determines that the accumulation of air pollutants in any place is attaining or has attained levels which could, if such levels are sustained or exceeded, lead to a substantial threat to the health of persons. In making this determination, the director shall be guided by the following criteria:

1. "Air Pollution Forecast": An internal watch by the division shall be actuated by a national weather advisory that an atmospheric stagnation advisory (ASA) is in effect or the equivalent forecast of a stagnant atmospheric condition.

2. "Air Pollution Alert": The alert level is that concentration of pollutants at which first stage control actions are to begin. An alert shall be declared when any one of the following levels is reached at any monitoring site and meteorological conditions are such that pollutant concentrations can be expected to remain at the designated levels for 12 or more hours or increase unless control actions are taken:

   a. Sulfur Dioxide - 1050 micrograms per cubic meter, 24-hour average.
      small

   b. Particulates - 375 micrograms per cubic meter, 24-hour average

   c. Sulfur Dioxide and Particulates Combined - Product of sulfur dioxide in micrograms per cubic meter, 24-hour average, and particulates in micrograms per cubic meter, 24-hour average, equal to 7.5×10^4.

   d. Carbon Monoxide - 23 milligrams per cubic meter, 8-hour average.

   e. Photochemical Oxidants - 400 micrograms per cubic meter, 1-hour average.

   f. Nitrogen Dioxide - 1130 micrograms per cubic meter, 1-hour average, and 280 micrograms per cubic meter, 24-hour average.

B. "Air Pollution Warning": The warning level indicates that air quality is continuing to degrade and that additional control actions are necessary. A warning will be declared when any one of the following levels is reached at any monitoring site and meteorological conditions are such that pollutant concentrations can be expected to remain at the designated levels for 12 or more hours or increase unless control actions are taken:

1. Sulfur Dioxide - 1600 micrograms per cubic meter, 24-hour average.

2. Particulates - 625 micrograms per cubic meter, 24-hour average.

3. Sulfur Dioxide and Particulates Combined - Product of sulfur dioxide in micrograms per cubic meter, 24-hour average, and particulates in micrograms per cubic meter, 24-hour average, equal to 25.1×10^4.

4. Carbon Monoxide - 34 milligrams per cubic meter, 8-hour average.

5. Photochemical oxidants - 800 micrograms per cubic meter, 1-hour average.

6. Nitrogen Dioxide - 2260 micrograms per cubic meter, 1-hour average and 560 micrograms per cubic meter, 24-hour average.

C. "Air Pollution Emergency": The emergency level indicates that air quality is continuing to degrade toward a level of significant harm to the health of persons and that the most stringent control actions are necessary. An emergency will be declared when any one of the following levels is reached at any monitoring site and meteorological conditions are such that this condition can be expected to remain at the designated levels for 12 or more hours:

1. Sulfur Dioxide - 2100 micrograms per cubic meter, 24-hour average.

2. Particulates - 875 micrograms per cubic meter, 24-hour average.

3. Sulfur Dioxide and Particulates Combined - Product of sulfur dioxide in micrograms per cubic meter, 24-hour average, and particulates in micrograms per cubic meter, 24-hour average, equal to 39.3×10^4.

4. Carbon Monoxide - 46 milligrams per cubic meter, 8-hour average.

5. Photochemical oxidants - 1200 micrograms per cubic meter, 1-hour average.

6. Nitrogen Dioxide - 3000 micrograms per cubic meter, 1-hour average, and 750 micrograms per cubic meter, 24-hour average.

D. "Episode Termination": Once declared, any status reached by application of these criteria shall remain in effect until the criteria for that level are no longer met. At such time, the next lower status will be assumed.

E. If the average wind speed for 24 hours is greater than 9.0 miles per hour, the criteria levels for particulates and sulfur dioxide and particulates combined shall not apply and no source control actions shall be taken.

F. If after an alert or warning episode level has been declared and air pollution concentrations and meteorological conditions do not deteriorate further or improve after 48 hours and control actions have been taken, the next higher episode shall be declared and its associated control actions implemented.

G. Air Pollutant concentration levels have been established which if exceeded could constitute imminent and substantial endangerment to the health of persons. These regulations are designed to prevent the excessive buildup of air pollutants during air pollution episodes. Thereby preventing the occurrence of an emergency due to the effects of these pollutants on the health of persons. Guidelines for the procedures and communication steps to be followed during an air pollution episode are presented in Appendices D and E of the State Air Pollution Control Implementation Plan.

H. When an air pollution alert is declared, the following control actions as applicable to the source emitting the pollutant of concern shall be implemented in the affected area:

1. All burning permits shall be suspended until further notice. The forest service shall be notified to postpone slash burning in the affected area.

2. Incineration shall be limited to the hours of 12 noon to 4 P.M.

3. Those manufacturing facilities with prearranged emission reduction plans as noted in the State Air Pollution Control Implementation Plan shall be notified to initiate alert stage control actions. Other sources shall be notified to minimize emissions by curtailing or deferring operations not on a required schedule and by maximizing the collection efficiency of control equipment. Emissions from batch operations shall be limited to the hours of 12 noon to 4 P.M.

4. The public shall be requested to voluntarily eliminate all unnecessary usage of motor vehicles.

I. When an Air Pollution Warning is declared, the following control actions as applicable to the source emitting the pollutant of concern shall be implemented in the affected area:

1. Burning of refuse, vegetation, trade wastes, and debris shall not be permitted by any person.

2. Use of incinerators shall be prohibited.

3. Those manufacturing facilities with prearranged emission reduction plans as noted in the State Air Pollution Control Implementation Plan shall be notified to initiate warning stage control actions. Other sources shall be notified to initiate a 40 percent or greater reduction in emissions by curtailment or cessation of operations. All processing industries shall be requested to effect a maximum reduction in heat load demands.

4. If possible, power plant generating loads shall be transferred outside the affected area. Power plant production shall be reduced by purchase of available energy from neighboring utilities.

5. Highway construction and paving activities shall be halted. All soil removal or grading operations at other construction sites shall be postponed.

6. Dust-producing crop preparation and cultivation activities shall be postponed. A maximum reduction in agricultural processing and handling operations shall be affected.

7. The public shall be requested to voluntarily reduce motor vehicle usage by use of carpools and other means of transportation and elimination of unnecessary operation.

J. When an Air Pollution Emergency is declared, the following control actions as applicable to the source emitting the pollutant of concern shall be implemented in the affected area:

1. Those manufacturing facilities with prearranged emission reduction plans as noted in the State Air Pollution Control Implementation Plan shall be notified to initiate emergency stage control actions. Other manufacturing establishments shall cease operations as directed by the governor.

2. As directed by the governor, all commercial, governmental, and institutional establishments, except those vital for public safety and welfare and enforcement of the emergency episode control actions, shall be closed.

3. Generating loads at power plants shall be reduced further resulting from industrial and commercial cutbacks.

4. All construction shall be halted as directed by the governor except that which must proceed to avoid emergent physical harm.

5. As directed by the governor, use of motor vehicles shall be prohibited except in emergencies with approval of the local police.

SECTION 8-1-3. PARTICULATE EMISSIONS FROM STATIONARY SOURCES

REG. 8-1-3.1 VISIBLE EMISSIONS: GENERAL

Except as otherwise provided in these regulations relating to specific types of sources, the opacity of any plume or effluent shall not be as great as nor greater than 20% on the Equivalent Opacity Scale except when the provisions of Reg. 8-1-1.6 apply.

REG. 8-1-3.2 FUGITIVE DUST

A. No persons shall cause, suffer, allow or permit a building or its appurtenances or open area to be used, constructed, repaired, altered or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Dust and other types of particulate shall be kept to a minimum by such measures as wetting down, covering, landscaping, paving, treating or by other reasonable means.

B. No persons shall cause, suffer, allow or permit the repair, construction or reconstruction of a roadway or alley without taking reasonable precautions to prevent particulate matter from becoming airborne. Dust and other particulates shall be kept to a minimum by employing temporary paving, dust, paliatives, wetting down, detouring or by other reasonable means. Earth or other material shall be removed from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water or by other means.

C. No person shall cause, suffer, allow or permit transportation of materials likely to give rise to airborne dust without taking reasonable precautions to prevent particulate matter from becoming airborne.

D. No person shall cause, suffer, allow or permit crushing, screening, handling or conveying of materials or other operations likely to give rise to airborne dust without taking reasonable precautions to prevent particulate matter from becoming airborne such as spray bars and wetting agents.

E. Within the limitations of § 36-790, Arizona Revised Statutes no person shall cause, suffer, allow or permit the performance of agricultural practices including but not limited to tilling of land and application of fertilizers without taking reasonable precautions to prevent particulate matter from becoming airborne.

REG. 8-1-3.3 INCINERATION

A. Notwithstanding the provisions of Reg. 8-1-3.1, no person shall cause, suffer, or allow to be emitted into the atmosphere, from any incinerator, smoke for more than 30 seconds in any 60 minute period the appearance, density, opacity or shade of which is as great as or greater than 20% on the Equivalent Opacity Scale.

B. No person shall cause, suffer, allow or permit to be emitted into the atmosphere from any incinerator or to pass a convenient measuring point near the incinerator stack outlet particulate matter to exceed 0.17 pounds per 1,000 pounds of gases, corrected to 50 percent excess air and calculated as if no auxiliary fuel had been used.

C. The amount of particulate matter emitted shall be determined by generally recognized standards or methods of measurement. The ASME Test Code of "Dust Separating Apparatus", PTC 21, the ASME Test Code for "Determining Dust Concentrations in Gas Streams", FTC 27 and the latest issue of the Los Angeles County Source Testing Manual shall be used as general guides but they may be modified, adjusted, or added to by the Control Officer to suit specific sampling conditions or needs based upon good practice, judgement and experience.

REG. 8-1-3.4 WOOD WASTE BURNERS

For a device used by the lumber industry exclusively for the burning of wood wastes, the provisions of Reg. 8-1-3.3 shall apply except during the building of a new fire not more than once each day for a period not to exceed 60 consecutive minutes. Upset time of three minutes in any one hour will not be considered a violation of these regulations.

(5.5) REG. 8-1-3.5 FUEL BURNING EQUIPMENT

A. This regulation applies to installations in which fuel is burned for the primary purpose of producing steam, hot water, hot air or other liquids, gases or solids and in the course of doing so the products of combustion do not come into direct contact with process materials. When any products or by-products of a manufacturing process are burned for the same purpose or in conjunction with any fuel, the same maximum emission limitations shall apply.

B. The heat content of coal shall generally be determined according to ASTM Method D-271, "Laboratory Sampling and Analysis of Coal or Coke" or ASTM Method D-2015, "Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter". These methods shall be used as guides but, may be modified, adjusted or added to by the Control officer to suit specific sampling conditions or needs based upon good practice, judgement and experience.

C. For purposes of this regulation the heat input shall be the aggregated heat content of all fuels whose products of combustion pass through a stack or other outlet. The heat input value used shall be the equipment manufacturer's or designer's guaranteed maximum input, whichever is greater. The total heat input of all fuel-burning units on a plant or premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted.

D. No person shall cause, suffer, allow or permit the emission of particulate matter, caused by combustion of fuel, from any fuel burning operation in excess of the quantity set forth in the following table:

HEAT INPUT MILLIONS OF BRITISH THERMAL UNITS (BTU) PER HOUR	MAXIMUM ALLOWABLE EMISSION OF PARTICULATE MATTER IN POUNDS PER HOUR PER MILLION BRITISH THERMAL UNITS (BTU) OF HEAT INPUT BASED UPON 24-HOUR ARITHMETIC AVERAGE
10	0.599
50	0.413
100	0.352
500	0.243
1,000	0.207
4,000	0.153
8,000	0.103
10,000	0.0909
15,000	0.0722
20,000	0.0613
40,000	0.0414
50,000	0.0364
100,000	0.0246

E. Interpolation of the date in this table for heat inputs greater than ten but less than 4,000 million Btu per hour shall be accomplished by use of the equation $Y = 1.02 X -0.231$. Interpolation and extrapolation of the data for heat inputs equal to or greater than 4,000 million Btu per hour shall be accomplished by use of the equation $Y = 17.0 X -0.568$ where Y = allowable rate of emission in pounds per million Btu and X = maximum equipment capacity rate in million Btu per hour.

REG. 8-1-3.6 PROCESS INDUSTRIES

A. No person shall cause, suffer, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any existing process source whatsoever, except incineration and fuel-burning equipment, in total quantities in excess of the amount calculated by the equation presented below and as illustrated by the following table on the allowable rate of emission based on process weight rate.

PROCESS-WEIGHT-RATE		EMISSION RATE	PROCESS-WEIGHT-RATE		EMISSION RATE
Lbs/Hr.	Tons/Hr.	Lbs/Hr.	Lbs/Hr.	Tons/Hr	Lbs/Hr.
100	0.05	0.561	16,000	8.00	16.5
200	0.10	0.877	18,000	9.00	17.9
400	0.20	1.40	20,000	10.00	19.2
600	0.30	1.83	30,000	15.00	25.2
800	0.40	2.22	40,000	20.00	30.5
1,000	0.50	2.53	50,000	25.00	35.4
1,500	0.75	3.38	60,000	30.00	40.0
2,000	1.00	4.10	70,000	35.00	41.3
2,500	1.25	4.76	80,000	40.00	42.5
3,000	1.50	5.38	90,000	45.00	43.6
3,500	1.75	5.96	100,000	50.00	44.6
4,000	2.00	6.62	120,000	60.00	46.3
5,000	2.50	7.58	140,000	70.00	47.8
6,000	3.00	8.56	160,000	80.00	49.0
7,000	3.50	9.49	200,000	100.00	51.2
8,000	4.00	10.4	1,000,000	500.00	69.0
9,000	4.50	11.2	2,000,000	1,000.00	77.6
10,000	5.00	12.0	6,000,000	3,000.00	92.7
12,000	6.00	13.6			

Note: To use table, determine the process weight rate as defined in Reg. 8-1-1.2, A, 47. Find this figure on the table, opposite which is the maximum number of pounds per hour of particulates which may be discharged into the atmosphere in any one hour. The method used for determining allowable rates of emission based on process weight tables is as follows: Interpolation of the data in the process weight table for process weight rates up to 60,000 lbs/hr shall be accomplished by use of the equation $E = 4.10 P0.67$ and interpolation and extrapolation of the data for process weight rates in excess of 60,000 lbs/hr shall be accomplished by use of the equation $E = 55.0 P0.11 - 40$, where E = rate of emission in lbs/hr and P = process weight rate in tons/hr. (See following examples)

EXAMPLE A: Process weight = 6 tons per hour

Equation - E = 4.10 p 0.67

Log E = Log 4.10 + (0.67) (Log 6)
Log E = 0.6128 + (067) (0.7782)
Log E = 0.6128 + 0.5214
Log E = 1.1342
E = Anti-log 1.1342
E = 13.6 pounds per hour

EXAMPLE B: Process weight = 60 tons per hour

Equation - E = 55.0 P0.11-40.0

Log (E+40.0) = Log 55.0 + (0.11) (Log 60)
Log (E+40.0) = 1.7404 + (0.11) (1.7782)
Log (E+40.0) = 1.7404 + 0.1956
Log (E+40.0) = 1.9360
Log (E+40.0) = Anti-log 1.9360
(E+40.0) = 86.3
E = 86.3 - 40.0
E = 46.3 pounds per hour

Section 8-1-4 SULFUR COMPOUND EMISSIONS

REG. 8-1-4.2 FUEL BURNING INSTALLATIONS

A. This regulation applies to an installation operated for the purpose of producing electric power with a resulting discharge of sulfur dioxide in the installation's effluent gases.

B. Steam power generating installations which are new sources shall not emit more than 0.80 pounds of sulfur dioxide, maximum two-hour average, per million Btu heat input when coal is fired. Steam power generating installations which are existing sources shall not emit more than 1.0 pounds of sulfur dioxide, maximum two-hour average, per million Btu heat input when coal is fired.

REG. 8-1-4.3 SULFITE PULP MILLS

No person shall cause, suffer, allow or permit discharge into the atmosphere of an amount in excess of nine pounds of sulfur oxides, calculated as sulfur dioxide, per air-dried ton of pulp produced from a sulfite pulp mill. The total emissions shall include sulfur oxides emitted from blow pits, washer vents, storage tanks and digester relief and recovery system.

REG. 8-1-4.4 SULFURIC ACID PLANTS

A. No person shall cause, suffer, allow or permit discharge into the atmosphere of more than 4.0 pounds of sulfur dioxide per ton of sulfuric acid produced (calculated as 100 percent H_2SO4), maximum two-hour average, from facilities that produce sulfuric acid by the contact process by burning elemental sulfur, alkylation acid, hydrogen sulfide, organic sulfides and mercaptans or acid sludge.

B. No person shall cause, suffer, allow or permit discharge into the atmosphere of more than 0.15 pounds of sulfuric acid mist per ton of sulfuric acid produced (calculated as 100 percent H_2SO4), maximum two-hour average, expressed as H_2SO4, from facilities that produce sulfuric acid by the contact process by burning elemental sulfur, alkylation acid, hydrogen sulfide, organic sulfides and mercaptans or acid sludge.

D. This regulation shall not apply to metallurgical plants or other facilities when conversion to sulfuric acid is utilized as means of controlling emissions to the atmosphere of sulfur dioxide or other sulfur compounds.

REG. 8-1-4.5 OTHER INDUSTRIES

No person shall cause, suffer, allow or permit to be discharged into the atmosphere from any other industry not covered in prior regulations of this section reduced sulfur, which includes sulfur equivalent from all sulfur emissions including but not limited to sulfur dioxide, sulfur trioxide and sulfuric acid, in excess of ten percent of the sulfur entering the process as feed.

SECTION 8-1-5 ORGANIC COMPOUND EMISSIONS FROM STATIONARY SOURCES

REG. 8-1-5.1 STORAGE OF VOLATILE ORGANIC COMPOUNDS

A. No person shall place, store or hold in any reservoir, stationary tank or other container having a capacity of 65,000 or more gallons any gasoline or any petroleum distillate having a vapor pressure of 2.0 pounds per square inch absolute or greater under actual storage conditions, unless such tank, reservoir, or other container is a pressure tank maintaining working pressure sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere, or is equipped with one of the following vapor loss control devices, properly installed, in good working order and in operation.

1. A floating roof consisting of a pontoon type of double-deck type roof resting on the surface of the liquid contents and equipped with a closure seal to close the space between the roof eave and tank wall, a vapor balloon or vapor dome, designed in accordance with accepted standards of the petroleum industry.

   The control equipment shall not be used if the gasoline or petroleum distillate has a vapor pressure of 12 pounds per square inch absolute or greater under actual storage conditions. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

2. Other equipment proven to be equal efficiency for preventing discharge of hydrocarbon gases and vapors to the atmosphere.

C. Fires set by or permitted by the county agricultural agents for the purpose of disease and pest prevention.

D. Fires set by or permitted by the Federal Government or any of its departments, agencies or agents, by the state or any of its agencies, departments or political subdivisions, for the purpose of watershed rehabilitation or control through vegetation manipulation.

E. Fires in "Orchard Heaters" for the purpose of frost protection in farming or nursery operations. Heaters to be so controlled that under field conditions they will not produce unconsumed solid carbonaceous matter at a rate in excess of one gram per minute per unit.

F. Agricultural burning shall be free of waste such as tires, rubbish, tar, paper or construction debris, so arranged that it will burn with a minimum of smoke, and reasonably free of dirt, soil and visible surface moisture, and the farming area is three acres or greater, with no open field burning in rural areas of high population density as determined by the Control Officer or his designate.

G. Fires permitted by the Control Officer for the burning of ditch banks, fence rows, canal laterals and for the purpose of weed abatement must use high temperature mechanical burners or equivalent where no reasonable mechanical, chemical or other methods of removal are available.

H. Open outdoor fires for the burning of ordinary household trash in non-urban areas of low population density, as determined by the Control Officer, where no refuse collection service is available. An area of low population density is considered to be an area with a density of approximately 10 well spread-out dwelling units or less per square mile.

B. Any other petroleum storage tank which is constructed or extensively remodeled on or after the effective date of these regulations shall be equipped with a submerged filling device or acceptable equivalent for the control of hydrocarbon emissions.

[illegible] REG. 8-1-5.2 LOADING OF VOLATILE ORGANIC COMPOUNDS

All facilities for Dock Loading of petroleum products, having a vapor pressure of 1.5 pounds per square inch absolute or greater at loading pressure, shall provide for submerged filling or acceptable equivalent for control of hydrocarbon emissions.

(51.16) REG. 8-1-5.3 PUMPS AND COMPRESSORS

All pumps and compressors which handle volatile organic compounds shall be equipped with mechanical seals or other equipment of equal efficiency to prevent the release of organic contaminants into the atmosphere.

(50.4) REG. 8-1-5.4 ORGANIC SOLVENTS: OTHER VOLATILE COMPOUNDS

Materials such as solvents or other volatile compounds including, but not limited to paints, acids, alkalies, pesticides, fertilizer and manure, shall be processed, stored, used and transported in such a manner and by such means that they will not unreasonably evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution, and where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or discharge, the installation and use of such control methods, devices or equipment shall be required.

SECTION 8-1-6 CARBON MONOXIDE EMISSIONS FROM STATIONARY SOURCES

(50.5) REG. 8-1-6.1 INDUSTRIAL

No person shall cause, suffer, allow or permit discharge from any source carbon monoxide emissions without the use of complete secondary combustion of waste gases generated by any process source.

SECTION 8-1-7 NITROGEN OXIDES EMISSIONS

(51.7) REG. 8-1-7.1 FUEL BURNING EQUIPMENT

A. This regulation applies to an installation operated for the purpose of producing power with a resulting discharge of nitrogen oxides in the installation effluent gases.

B. Steam power generating installations which are new sources shall not emit more than 0.20 pounds of nitrogen oxides, maximum two-hour average, calculated as nitrogen dioxide, per million BTU heat input when gaseous fossil fuel is fired.

C. Steam power generating installations which are new sources shall not emit more than 0.30 pounds of nitrogen oxides, maximum two-hour average, calculated as nitrogen dioxide, per million BTU heat input when solid fossil fuel is fired.

D. Steam power generating installations which are new sources shall not emit more than 0.70 pounds of nitrogen oxides, maximum two-hour average, calculated as nitrogen dioxide, per million BTU heat input when solid fossil fuel is fired.

REG. 8-1-7.2 NITRIC ACID PLANTS

A. No person shall cause, suffer, allow or permit discharge from any new source nitric acid plant producing weak nitric acid, which is 30 to 70 percent in strength, by either the increased pressure or atmospheric pressure process, of more than 3.0 pounds of total oxides of nitrogen per ton of acid produced, maximum two-hour average, expressed as nitrogen dioxide.

B. No person shall cause, suffer, allow or permit discharge from any existing source nitric acid plant producing weak nitric acid, which is 30 to 70 percent in strength, by either the increased pressure of atmospheric pressure process, of more than 5.5 pounds of total oxides of nitrogen per ton of acid produced, maximum two-hour average, expressed as nitrogen dioxide.

SECTION 8-1-8 OPEN BURNING

REG. 8-1-8.1 PROHIBITION

Notwithstanding the provisions of any other section of this regulation, it is unlawful for any person to ignite, cause to be ignited, permit to be ignited, or suffer, allow, or maintain any open outdoor fire except as provided in this section.

REG. 8-1-8.2 EXCEPTIONS

The following fires are excepted from the provisions of this section:

A. Fires used only for cooking of food or for providing warmth for human beings or for bonafide recreational purposes or the branding of animals may be conducted without a permit provided they do not create public nuisance.

B. Any fire set or permitted by any public officer in the performance of official duty, if such fire is set or permission given for the purpose of weed abatement, the prevention of a fire or Public Health and Safety of weed abatement, the prevention of a fire or Public Health and Safety hazards, including the disposal of dangerous materials where there is no safe alternate method of disposal, or instruction in the method of fighting fires.